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Scientific and Technical Information Center

# SEARCH REQUEST FORM

Requester's Full Name: Edward Yeager Date: 5/5/08

Art Unit: 1621 Phone Number: 2-3049 Serial Number: 10/533,036

Location (Bldg/Room): CP4 (Mailbox #): 3B15 Results Format Preferred (circle): PAPER DISK

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract, or fill out the following:

Title of Invention: Novel compounds

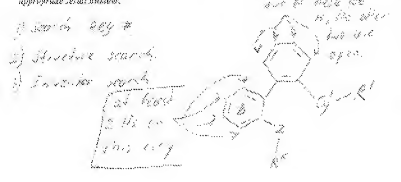
Inventors (please provide full names): Eric Bills

Earliest Priority Date: 10/16/02

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the utility and specific structures. Keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known

*For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

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FILE COVERS 1907 - 12 May 2008 VOL 148 ISS 20
FILE LAST UPDATED: 11 May 2008 (20080511/ED)

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'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

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L25 319 SEA FILE=ZCAPLUS ABB=ON PLU=ON HURST D?/AU
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PROCESSING COMPLETED FOR L40
PROCESSING COMPLETED FOR L43
L49           22 DUP REM L40 L43 (26 DUPLICATES REMOVED)
                 ANSWERS '1-21' FROM FILE ZCAPLUS
                 ANSWER '22' FROM FILE BIOSIS

=> d ibib abs L49 1-21; d iall L49 22

L49  ANSWER 1 OF 22  ZCAPLUS  COPYRIGHT 2008 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2008:70761  ZCAPLUS  Full-text
DOCUMENT NUMBER:          148:168573
TITLE:                    Indole derivatives as EP1 ligands, their preparation,
                          pharmaceutical compositions, and use in therapy
INVENTOR(S):              Giblin, Gerard Martin Paul; Hall, Adrian; Hurst,
                          David Nigel; Scoccitti, Tiziana; Theobald, Pamela Joan
PATENT ASSIGNEE(S):       Glaxo Group Limited, UK
SOURCE:                   PCT Int. Appl., 47pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.            KIND   DATE        APPLICATION NO.         DATE
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     WO 2008006790          A1    20080117    WO 2007-EP56936         20070709
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             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
             MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
             PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
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             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:                       GB 2006-14068       A  20060714
OTHER SOURCE(S):          MARPAT 148:168573
GI
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *
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AB The invention relates to indole derivs. of formula I, which are ligands for the prostanoid EP1 receptor. In compds. I, R1 is H, Me, CF3, Cl, F, or Br; R2 is Et, Pr, iso-Pr, iso-Bu, 2,2-dimethylpropyl, 3,3-dimethylbutyl,

(un)substituted benzyl, 2,2,2-trifluoroethyl, or isobutanoyl; R3 is substituted oxazolyl, substituted thiazolyl, substituted thiazolylmethyl, substituted pyridinyl, substituted furyl, substituted thienyl, or substituted phenyl; and X is CH or N. The invention also relates to the preparation of I, pharmaceutical compns. comprising a compound I together with a pharmaceutical carrier and/or excipient, as well as to the use of the compns. for the treatment of conditions mediated by the action of prostaglandin E2 (PGE2) on the EP1 receptor, such as pain, inflammatory disorders, and neurodegenerative disorders. Acylation of 6-chloroindole with propanoyl chloride followed by hydride reduction resulted in the formation of indole II, which underwent substitution of Et 2-bromo-4-thiazolecarboxylate and ester hydrolysis to give N-(thiazolyl)indole III. Several compds. of the invention, e.g., III, expressed pIC50 values above 7 for their affinity towards the prostanoid EP1 receptor and pKi values above 7.0 in a human EP1 calcium mobilization functional assay.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 2 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 2008:462767 ZCAPLUS Full-text

TITLE: Discovery of a novel indole series of EP1 receptor antagonists by scaffold hopping

AUTHOR(S): Hall, Adrian; Billinton, Andy; Brown, Susan H.; Chowdhury, Anita; Giblin, Gerard M. P.; Goldsmith, Paul; Hurst, David N.; Naylor, Alan; Patel, Sadhana; Scoccitti, Tiziana; Theobald, Pamela J.

CORPORATE SOURCE: Neurology Centre of Excellence for Drug Discovery, GlaxoSmithKline, Harlow, Essex, CM19 5AW, UK

SOURCE: Bioorganic & Medicinal Chemistry Letters (2008), 18(8), 2684-2690
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We describe the medicinal chemical approach that generated a novel indole series of EP1 receptor antagonists. The SAR of this new template was evaluated and culminated in the identification of compound 12g which demonstrated in vivo efficacy in a preclin. model of inflammatory pain.

L49 ANSWER 3 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 2008:324741 ZCAPLUS Full-text

TITLE: Novel methylene-linked heterocyclic EP1 receptor antagonists

AUTHOR(S): Hall, Adrian; Bit, Rino A.; Brown, Susan H.; Chowdhury, Anita; Giblin, Gerard M. P.; Hurst, David N.; Kilford, Ian R.; Lewell, Xiao; Naylor, Alan; Scoccitti, Tiziana

CORPORATE SOURCE: Neurology Centre of Excellence for Drug Discovery, GlaxoSmithKline, New Frontiers Science Park, Harlow, Essex, CM19 5AW, UK

SOURCE: Bioorganic & Medicinal Chemistry Letters (2008), 18(5), 1592-1597
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We describe the SAR, in terms of heterocyclic replacements, for a series of pyrazole EP1 receptor antagonists. This study led to the identification of several aromatic heterocyclic replacements for the pyrazole in the original

compound Investigation of replacements for the methylene linker uncovered disparate SAR in the thiazole and pyridine series.

L49 ANSWER 4 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2007:1302250 ZCAPLUS Full-text
DOCUMENT NUMBER: 147:541735
TITLE: Preparation of substituted 2-benzylpyridine compounds for treating a condition mediated by the action of PGE2 at EP1 receptors
INVENTOR(S): Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel; Scoccitti, Tiziana
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 58pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2007128752 | A1 | 20071115 | WO 2007-EP54254 | 20070502 |

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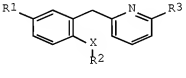
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: GB 2006-8825 A 20060504
OTHER SOURCE(S): MARPAT 147:541735
GI

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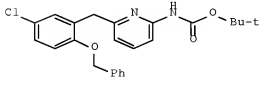



II

AB The title compds. I [R1 = halo; X = O or S; R2 = iso-Bu or (un)substituted CH2Ph; R3 = CONH(CH2)mR4, NHCO2R5, CH(OH)CF3, etc.; R4 = H, alkyl, cycloalkyl, Ph or pyridyl; R5 = tert-Bu; m = 0-1] which bind with high affinity to the EP1 receptor, were prepared E.g., a multi-step synthesis of II, starting from 4-chlorophenol and benzyl bromide, was given. Exemplified compds. I were evaluated in various assays (data given). Pharmaceutical composition comprising compound I is disclosed.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 5 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 5

ACCESSION NUMBER: 2007:79571 ZCAPLUS Full-text

DOCUMENT NUMBER: 146:220141

TITLE: The discovery of 6-[2-(5-chloro-2-{[(2,4-difluorophenyl)methyl]oxy}phenyl)-1-cyclopenten-1-yl]-2-pyridinecarboxylic acid, GW848687X, a potent and selective prostaglandin EP1 receptor antagonist for the treatment of inflammatory pain

AUTHOR(S): Giblin, Gerard M. P.; Bit, Pino A.; Brown, Susan H.; Chaignot, Helene M.; Chowdhury, Anita; Chessell, Iain P.; Clayton, Nicholas M.; Coleman, Tanya; Hall, Adrian; Hammond, Beverley; Hurst, David N.; Michel, Anton D.; Naylor, Alan; Novelli, Riccardo; Scoccitti, Tiziana; Spalding, David; Tang, Sac P.; Wilson, Alex W.; Wilson, Rich

CORPORATE SOURCE: Department of Medicinal Chemistry and DMPK, New Frontiers Science Park, Essex, CM19 5AW, UK

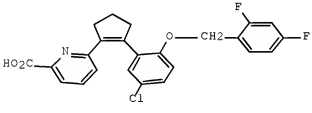
SOURCE: Bioorganic & Medicinal Chemistry Letters (2007), 17(2), 385-389
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI




I

AB The discovery of a series of selective EP1 receptor antagonists based on a 1,2-diarylcyclopentene template is described. After defining the structural requirements for EP1 potency and selectivity, heterocyclic rings were incorporated to reduce log D and improve in vitro pharmacokinetic properties. The 2,6-substituted pyridines and pyridazines gave an appropriate balance of potency, in vivo pharmacokinetic properties and a low potential for inhibiting

a range of CYP450 enzymes. From this series, GW848687X (I) was shown to have an excellent profile in models of inflammatory pain and was selected as a development candidate.

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 6 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 6

ACCESSION NUMBER: 2006:1157169 ZCAPLUS Full-text
DOCUMENT NUMBER: 145:471519
TITLE: Preparation of pyrazole compounds as EP1 prostaglandin receptor antagonists
INVENTOR(S): Conway, Elizabeth Ann; Giblin, Gerard Martin Paul; Gibson, Mairi; Hall, Adrian; Hayhow, Thomas George Christopher; Healy, Mark Patrick; Hurst, David Nigel; Kilford, Ian Reginald; McKeown, Stephen Carl; Naylor, Alan; Price, Helen Susanne; Rawlings, Derek Anthony
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 203pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006114313 | A1 | 20061102 | WO 2006-EP3919 | 20060424 |
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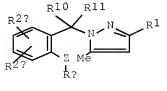
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| EP 1874303 | A1 | 20080109 | EP 2006-742719 | 20060424 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR | | | | |

PRIORITY APPLN. INFO.: GB 2005-8472 A 20050426
WO 2006-EP3919 W 20060424
OTHER SOURCE(S): MARPAT 145:471519
GI




I

AB Pyrazoles (shown as I; variables defined below; e.g. 1,1-dimethylethyl [1-[[5-chloro-2-[(phenylmethyl)oxy]phenyl]methyl]-5-methyl-1H-pyrazol-3- yl]carbamate (1)) or a pharmaceutically acceptable derivative thereof, a process for the preparation of such compds., pharmaceutical compns. comprising such compds. and the use of such compds. in medicine are disclosed. Although the methods of preparation are not claimed, prepns. and/or characterization data for .apprx.500 examples of I are included. For example, 1 was prepared from 1-[[5-chloro-2-[(phenylmethyl)oxy]phenyl]methyl ]-5-methyl-1H-pyrazole-3-carboxylic acid, Et3N, and Ph2P(O)N3 in tBuOH; the starting acid was prepared by saponification of the Et ester, which was prepared by O-benzylation of Et 1-[(5-chloro-2-hydroxyphenyl)methyl]-5-methyl-1H- pyrazole-3-carboxylate (preparation of similar compound described). For I: Z is O, S, SO or SO2; Rx is (un)substituted C2-10alkyl, C2-10alkenyl, C2-10alkynyl, CQaQb-heterocyclyl, CQaQb-bicyclic heterocyclyl, or CQaQb-aryl; R1 is CONR3R4, NR3CO2R5, NR3COR6, OCONR3R7, tetrazolyl, oxazolin-2-yl, oxazol-2-yl, benzoxazol-2-yl, pyrrolidinonyl, isoindoledionyl, dihydroisoindolonyl, or (un)substituted SO2NHCOaryl; or R1 is (un)substituted imidazolyl or 1,2,4-triazolyl wherein optionally the imidazole or 1,2,4-triazole ring is fused to give an (un)substituted bicyclic or tricyclic ring system; or R1 = 4-R9-2-oxopiperazin-1-yl. R2a and R2b = H, halo, CN, SO2alkyl, SR3, NO2, or (un)substituted alkyl or alkoxy; R3 is H or C1-4alkyl; R4 is H, OH, (un)substituted alkyl, aryl, heterocyclyl, bicyclic heterocyclyl, CQcQdaryl, CQcQdheterocyclyl, or CQcQdbicyclic heterocyclyl, or SO2R8; R5 is (un)substituted C1-4alkyl, substituted cyclohexyl, Ph, et al.; R6 is alkyl or (un)substituted aryl, heterocyclyl, bicyclic heterocyclyl, CQcQd-Y-aryl, CQcQd-Y-heterocyclyl or CQcQd-Y-bicyclic heterocyclyl; R7 is (un)substituted alkyl, alkenyl, aryl, or CQcQdaryl; R8 is (un)substituted alkyl, aryl or heterocyclyl. R9 is (un)substituted alkyl, alkenyl, (un)substituted CQcQd-Y-aryl, (un)substituted CQcQd-Y-heterocyclyl or (un)substituted CQcQd-Y-bicyclic heterocyclyl; R10 and R11 = H, F and alkyl; or R10 and R11 together with the C to which they are attached form a cycloalkyl ring, optionally containing up to one heteroatom = O, S, NH or N-alkyl; and Y is CH2 or a bond; Qa and Qb = H, CH3 and F; Qc and Qd = H, CH3 and F; addnl. details including provisos are given in the claims. Results are summarized for a binding assay for the human prostanoid EP1 receptor, a human EP1 Ca mobilization assay and for a human EP3 Ca mobilization assay for many examples of I.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 7 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 7
ACCESSION NUMBER: 2006:1147656 ZCAPLUS Full-text
DOCUMENT NUMBER: 145:471518
TITLE: Preparation of oxazole and thiazole compounds as EP1 prostaglandin receptor antagonists
INVENTOR(S): Bit, Pino Antonio; Hall, Adrian; Hurst, David Nigel; Scocchitti, Tiziana
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 124pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006114274 | A1 | 20061102 | WO 2006-EP3810 | 20060424 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 1874776 A1 20080109 EP 2006-742682 20060424

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR

PRIORITY APPLN. INFO.: GB 2005-8463 A 20050426

WO 2006-EP3810 W 20060424

OTHER SOURCE(S): MARPAT 145:471518

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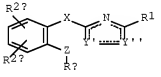

I

AB Oxazoles and thiazoles (shown as I; variables defined below; e.g. 2-[[5-chloro-2-[(phenylmethyl)oxy]phenyl]methyl]-1,3-thiazole-4-carboxylic acid (1)) or a pharmaceutically acceptable derivative thereof, a process for the preparation of such compds., pharmaceutical compns. comprising such compds. and the use of such compds. in medicine are disclosed. Although the methods of preparation are not claimed, prepns. and/or characterization data for .apprx.180 examples of I are included. For example, 1 was prepared by saponification of the Et ester, which was prepared by cyclization of Et bromopyruvate with 2-[5-chloro-2-[(phenylmethyl)oxy]phenyl]ethanethioamide , which was prepared from Lawesson's Reagent and 2-[5-chloro-2-[(phenylmethyl)oxy]phenyl]acetamide, which was prepared from [5-chloro-2-[(phenylmethyl)oxy]phenyl]acetic acid, which was prepared from the Et ester, which was prepared from 1-[5-chloro-2- [(phenylmethyl)oxy]phenyl]ethanone, which was prepared from benzyl bromide and 1-(5-chloro-2-hydroxyphenyl)ethanone. Results are summarized for a binding assay for the human prostanoid EP1 receptor, a human EP1 Ca mobilization assay and for a human EP3 Ca mobilization assay for many examples of I. For I: either Y' is CH and Y'' is O or S, or Y' is O or S and Y is CH thus forming an oxazole or a thiazole ring; X is CR7R8, O, NR4, S, SO, or SO2, or X is a bond; Z is O, S, SO or SO2; Rx is (un)substituted C3-10alkyl, C3-10alkenyl, C3-10alkynyl, CQaQb-heterocyclyl, CQaQb-bicyclic heterocyclyl, or CQaQb-aryl; R1 is CO2H, CQcQdCO2H, tetrazolyl, CH2tetrazolyl, CONR4R5, NR4CO2R6, NR4COR6 or 1,2,4-triazol-3-yl (un)substituted on a ring C; or R1 = imidazolyl or pyrazolyl wherein optionally the imidazole or pyrazole ring is fused to give an (un)substituted bicyclic or tricyclic ring system; R2a and R2b = H, halo, CN, SO2alkyl, SR4 or NO2 or (un)substituted alkyl or (un)substituted alkoxy. R4 is H or (un)substituted alkyl; R5 is H or (un)substituted alkyl, aryl, heterocyclyl, SO2aryl, SO2alkyl, SO2heterocyclyl, CQaQbaryl, or CQaQbheterocyclyl; or R4 and R5 together with the N to which they are attached form a heterocyclic or bicyclic heterocyclic ring; R6 is (un)substituted alkyl or aryl; R7 is H, F or alkyl; R8 is H, hydroxy, F or alkyl; or R7 and R8

together with the C to which they are attached form a cycloalkyl ring, optionally containing up to one heteroatom = O, S, NH and N-alkyl; or R7 and R together with the C to which they are attached form a carbonyl group; and Qa and Qb = H, CH3 and F; Qc and Qd = H and CH3; addnl. details including provisos are given in the claims.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 8 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 8

ACCESSION NUMBER: 2006:1147677 ZCAPLUS Full-text

DOCUMENT NUMBER: 145:471368

TITLE: Preparation of furan derivatives as human EP1 receptor antagonists

INVENTOR(S): Bit, Rino Antonio; Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel; Kilford, Ian Reginald; Scoccitti, Tiziana

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 85pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006114272 | A1 | 20061102 | WO 2006-EP3808 | 20060424 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| EP 1874749 | A1 | 20080109 | EP 2006-724558 | 20060424 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR | | | |
| PRIORITY APPLN. INFO.: | | | GB 2005-8460 | A 20050426 |
| | | | WO 2006-EP3808 | W 20060424 |

OTHER SOURCE(S): MARPAT 145:471368

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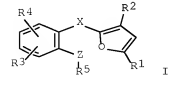


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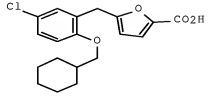


II

AB The title compds. with general formula I [wherein R1 = CO2H, imidazolyl, pyrazolyl, etc.; R2 = H or (un)substituted C1-3 alkyl; R3 and R4 = independently H, halo, CN, etc.; R5 = (un)substituted C2-20 alkyl, C2-20 alkenyl, C2-20 alkynyl, etc.; X = (un)substituted CH2, O, S, SO, or SO2; Z = O, S, SO, or SO2] or pharmaceutically acceptable derivs. thereof are prepared as human EP1 receptor antagonists. For example, compound II•Na was prepared in a multistep synthesis. II•Na exhibited a pIC50 ≥ 8 in the binding assay test for human prostanoid EP1 receptor using Chinese hamster ovary-K1 (CHO-K1) cells.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 9 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 9

ACCESSION NUMBER: 2006:627600 ZCAPLUS Full-text

DOCUMENT NUMBER: 145:83231

TITLE: Pyridine compounds as selective EP1 antagonists, their preparation, pharmaceutical compositions, and use in therapy

INVENTOR(S): Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel; Rawlings, Derek Anthony; Scoccitti, Tiziana

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006066968 | A1 | 20060629 | WO 2005-EP14061 | 20051221 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2005318372 | A1 | 20060629 | AU 2005-318372 | 20051221 |
| CA 2592442 | A1 | 20060629 | CA 2005-2592442 | 20051221 |
| EP 1833795 | A1 | 20070919 | EP 2005-817767 | 20051221 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR | | | | |
| IN 2007DN04275 | A | 20070824 | IN 2007-DN4275 | 20070605 |
| KR 2007091301 | A | 20070910 | KR 2007-714271 | 20070622 |
| MX 200707830 | A | 20070725 | MX 2007-7830 | 20070625 |
| NO 2007003332 | A | 20070917 | NO 2007-3332 | 20070628 |
| CN 101128430 | A | 20080220 | CN 2005-80048605 | 20070823 |

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| GB 2004-28263 | A | 20041223 |
| GB 2005-8458 | A | 20050426 |
| GB 2005-24675 | A | 20051202 |
| WO 2005-EP14061 | W | 20051221 |

OTHER SOURCE(S): MARPAT 145:83231

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to pyridine compds. of formula I, which are antagonists of prostaglandin E2 receptors EP1 subtype. In compds. I, X is N and Y is CH or X is CH and Y is N; Z is O, S, SO, or SO2; R1 is carboxy, sulfonylaminocarbonyl, carboxymethyl, acylamino, tetrazolyl, or tetrazolylmethyl; R2 and R3 are independently selected from H, halo, cyano, SH, nitro, alkylsulfonyl, (un)substituted alkylthio, (un)substituted alkyl, (un)substituted alkoxy, (un)substituted aryl, and (un)substituted heteroaryl; R4 and R5 are independently H, halo, NH2, (un)substituted alkyl, (un)substituted alkoxy, or primary or secondary amino; R6 is (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, (un)substituted heterocyclyl-C(R9)(R10)-, or (un)substituted aryl-C(R9)(R10)-, where R9 and R10 are independently selected from H, Me, and F; R7 is H, F, or alkyl; and R8 is H, OH, F, or alkyl, or R7 and R8, together with the carbon atom to which they are attached, form a cycloalkyl ring, optionally containing one heteroatom selected from O, S, NH, and N-alkyl, or R7 and R8, together with the carbon atom to which they are attached, form a carbonyl group. The invention also relates to the preparation of I, pharmaceutical compns. comprising a compound I together with a pharmaceutical carrier and/or excipient, as well as to the use of the compns. for the treatment of conditions mediated by the action of prostaglandin E2 at the EP1 receptor, such as pain, inflammatory disorders, or neurodegenerative disorders. Regioselective benzylation of 4-chloro-2-(hydroxymethyl)phenol followed by bromination, conversion to the organozinc reagent, substitution of Et 6-bromo-2-pyridinecarboxylate, and debenzylation gave pyridinecarboxylate II, which was benzylated with 4-chloro-2-fluorobenzyl bromide and hydrolyzed with NaOH to give sodium pyridinecarboxylate III. Of the compds. of the invention, 14 compds., e.g., III, expressed pIC50 values of 7.5 or higher for EP1 receptor binding and 13 compds., e.g., III, expressed pKi values of 7.5 or higher for antagonism of EP1 calcium mobilization.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 10 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 10

ACCESSION NUMBER: 2006:315138 ZCAPLUS Full-text

DOCUMENT NUMBER: 144:480399

TITLE: Discovery of novel biaryl heterocyclic EP1 receptor antagonists

AUTHOR(S): Hall, Adrian; Bit, Rino A.; Brown, Susan H.; Chaignot, Helene M.; Chessell, Iain P.; Coleman, Tanya; Giblin, Gerard M. P.; Hurst, David N.; Kilford, Ian P.; Lewell, Xiao Q.; Michel, Anton D.; Mohamed, Shiyam; Naylor, Alan; Novelli, Riccardo; Skinner, Lee; Spalding, David J.; Tang, Sac P.; Wilson, Richard J.

CORPORATE SOURCE: Neurology and Gastrointestinal Centre of Excellence for Drug Discovery, GlaxoSmithKline, Essex, CM19 5AW, UK

SOURCE: Bioorganic & Medicinal Chemistry Letters (2006), 16(10), 2666-2671
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 144:480399

AB We describe the generation of novel EP1 receptor antagonists by investigation of thiophene isosteres. In addition, we disclose preliminary in vitro and in vivo DMPK for selected compds.

REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 11 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 11

ACCESSION NUMBER: 2005:1220712 ZCAPLUS Full-text

DOCUMENT NUMBER: 143:477851

TITLE: Preparation of sodium 6-(2-biphenyl)-2-pyridinecarboxylates for treating conditions mediated by the action of PGE2 at the EP1 receptor

INVENTOR(S): Bit, Rino Antonio; Giblin, Gerard Martin Paul; Hall, Adrian; Hayhow, Thomas; Hurst, David Nigel; Kilford, Ian Peginald; Miller, Neil Derek; Naylor, Alan; Novelli, Riccardo; Scoccitti, Tiziana

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005108369 | A1 | 20051117 | WO 2005-EP4726 | 20050429 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1742916 | A1 | 20070117 | EP 2005-738052 | 20050429 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, LV | | | | |
| JP 2007536309 | T | 20071213 | JP 2007-511989 | 20050429 |
| US 20070225340 | A1 | 20070927 | US 2006-568573 | 20061102 |
| PRIORITY APPLN. INFO.: | | | GB 2004-10121 A | 20040506 |
| | | | WO 2005-EP4726 W | 20050429 |

OTHER SOURCE(S): MARPAT 143:477851

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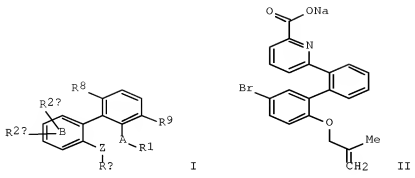

I II

AB The title compds. I [A = (un)substituted aryl, 5-6 membered heterocyclyl, bicyclic heterocyclyl; B = Ph, pyridyl; Z = O, S, SO, SO2; R1 = CO2H, CN, COalkyl, etc.; R2a, R2b = H, halo, CN, etc.; Rx = (un)substituted alkyl [wherein 1 or 2 of the non-terminal carbon atoms are optionally replaced by NR4, O or SOn (wherein n = 0-2)], (un)substituted alkenyl, (un)substituted alkynyl, etc.; R8, R9 = H, halo, CF3, alkoxy, alkyl], useful in the treatment of conditions mediated by the action of PGE2 at the EP1 receptor (which is associated with smooth muscle contraction, pain (in particular inflammatory, neuropathic and visceral), inflammation, allergic activities, renal regulation and gastric or enteric mucus secretion), were prepared Thus, treating suspension of Et 6-{5'-bromo-2'-[(2-methyl-2-propen-1-yl)oxy]-2-biphenylyl}-2-pyridinecarboxylate in EtOH with 1M NaOH afforded II. The exemplified compds. I showed an antagonist pIC50 of 6.0 or greater at EP2 receptors. The pharmaceutical composition comprising the compound I is disclosed.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 12 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 12
ACCESSION NUMBER: 2005:523415 ZCAPLUS Full-text
DOCUMENT NUMBER: 143:59814
TITLE: Preparation of aryl-substituted pyrroles as prostanoid EP1 inhibitors useful for treating inflammation
INVENTOR(S): Giblin, Gerard Martin Paul; Hall, Adrian; Healy, Mark Patrick; Lewell, Xiao Qing; Miller, Neil Derek; Novelli, Riccardo; King, Francis David; Naylor, Alan
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005054191 | A1 | 20050616 | WO 2004-EP13744 | 20041130 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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|---|---|---|---|---|---|
| EP 1697319 | A1 | 20060906 | EP 2004-803473 | | 20041130 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR, IS | | | | | |
| JP 2007513120 | T | 20070524 | JP 2006-541906 | | 20041130 |
| US 20070072906 | A1 | 20070329 | US 2006-596153 | | 20060913 |
| PRIORITY APPLN. INFO.: | | | GB 2003-28024 | A | 20031203 |
| | | | WO 2004-EP13744 | W | 20041130 |

OTHER SOURCE(S): MARPAT 143:59814

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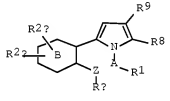


I

AB Title compds. I [A = aryl, heterocyclyl, etc.; B = Ph, pyridyl; Z = O, SO0-2; R1 = carboxy, CN, alkoxy, etc.; R2a-2b = H, halo, alkyl, etc.; Rx = alkyl, etc.; R8 = H, Cl, CF3, etc.; R9 = halo, H, CF3, alkyl] are prepared For instance, 6-[2-(5-Chloro-2-benzyloxyphenyl)-5-methylpyrrol-1- yl]picolinic is prepared via the metalation/carboxylation of 6-[2-(5-chloro-2-benzyloxyphenyl)-5-methylpyrrol-1-yl]-2-bromopyridine. Compds. of the invention have an antagonist pIC50 = 6.0 to 9.0 at EP1 receptors and pIC50 < 6.0 at EP3 receptors. I are useful in the treatment of inflammatory disorders.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 13 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 13

ACCESSION NUMBER: 2005:395279 ZCAPLUS Full-text
DOCUMENT NUMBER: 142:447210
TITLE: Preparation of heterocyclic compounds for treating conditions mediated by EP1 receptor and TxA2 receptor
INVENTOR(S): Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel; Lewell, Xiao Qing; Lorthioir, Olivier Eric; McKeown, Stephen Carl; Scoccitti, Tiziana; Watson, Stephen Paul
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|

WO 2005040128 A1 20050506 WO 2004-EP11964 20041021
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
EP 1675832 A1 20060705 EP 2004-790757 20041021
EP 1675832 B1 20080220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR
JP 2007509104 T 20070412 JP 2006-536056 20041021
AT 386725 T 20080315 AT 2004-790757 20041021
US 20070060596 A1 20070315 US 2006-576460 20060522
PRIORITY APPLN. INFO.: GB 2003-24893 A 20031024
GB 2003-24895 A 20031024
WO 2004-EP11964 W 20041021
OTHER SOURCE(S): CASREACT 142:447210; MARPAT 142:447210
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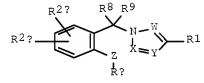

I

AB Compds. of formula [wherein W, X = N or CR10 (wherein R10 = H, halogen, each (un)substituted alkyl, aryl, or heterocyclyl); Y = N or CR12 (wherein R12 = H, halogen, Me, CF3); Z = O, S, SO, SO2; R1 = CO2R4, CONR5R6, CH2CO2H, (un)substituted SO2alkyl, SO2NR5R6, NR5CONR5R6, 2H-tetrazol-5-ylmethyl (un)substituted heterocyclyl; R2a, R2b = H, halo, each (un)substituted alkyl, alkoxy, or heteroaryl, cyano, SO2alkyl, SR5, NO2, CONR5R6; Rx = (un)substituted alkyl (wherein 1 or 2 of the nonterminal carbon atoms are optionally substituted by a group independently selected from NR4, O, S, SO, and SO2) or Rx = each (un)substituted CQaQb-heterocyclyl, CQaQb-bicyclic heterocyclyl, or CQaQb-aryl; R4, R5 = H, (un)substituted alkyl; R6 = H, cyano, each (un)substituted alkyl, heteroaryl, SO2aryl, SO2alkyl, SO2heteroaryl, CQaQbaryl, or CQaQbheteroaryl, COR7; R7 = H, each (un)substituted alkyl, heteroaryl, or aryl; R8, R9 = H, F, alkyl; or CR8R9 together forms a cycloalkyl ring, optionally containing up to one heteroatom selected from O, S, NH or N-alkyl; Qa, Qb = H, Me, F] or pharmaceutically acceptable derivs. thereof are prepared These compds. including pyrazole-3-carboxylic acids and pyrrole-3-carboxylic acids have activity at both the EP1 and TP receptors and are useful in the treatment of conditions such as inflammatory pain, neuropathic pain or visceral pain mediated by the action of prostaglandin E2 (PGE2) at the EP1 receptor and conditions mediated by the action of thromboxane on the TP (also known as TxA2) receptor. Thus, Me 1H-pyrazole-3-carboxylate (12.61 mg, 0.1 mmol) was dissolved in a 0.105 M solution of potassium tert-butoxide in ethanol (1 mL, 11.78 mg, 0.105 mmol), stirred at room temperature for 5 min, treated with a 0.1 M solution of 4-bromo-2-

(bromomethyl)phenyl phenylmethyl ether in ethanol (1 mL, 35.6 mg, 0.1 mmol), and stirred and heated at 60° under nitrogen for 4 h to give, after workup, 27.6% 1-[[5-bromo-2- [(phenylmethyl)oxy]phenyl]methyl]-5-methyl-1H-pyrazole-3-carboxylic acid. The compds. I had an antagonist binding pIC50 value of 6.2-9.4 at human EP1 receptors and a pIC50 value of <5.7 at human EP3 receptors and exhibited a functional pKi of 6.2-10.5 and/or a functional pIC50 of 5.3-8.9.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 14 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 14
ACCESSION NUMBER: 2005:371224 ZCAPLUS Full-text
DOCUMENT NUMBER: 142:430147
TITLE: Preparation of cyclohexene compounds which bind with high affinity to the EP1 receptor
INVENTOR(S): Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005037794 | A1 | 20050428 | WO 2004-EP11365 | 20041006 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1670764 | A1 | 20060621 | EP 2004-790267 | 20041006 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| JP 2007508266 | T | 20070405 | JP 2006-530140 | 20041006 |
| PRIORITY APPLN. INFO.: | | | GB 2003-23584 | A 20031008 |
| | | | WO 2004-EP11365 | W 20041006 |

OTHER SOURCE(S): CASREACT 142:430147; MARPAT 142:430147
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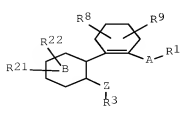


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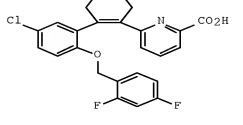


II

AB The title compds. I [A = (un)substituted aryl, 5-6 membered heterocyclyl, bicyclic heterocyclyl; B = Ph, pyridyl; Z = O, S, SO, SO2; R1 = CO2H, CN, CH2CO2H, etc.; R21, R22 = H, halo, alkyl, etc.; R3 = (un)substituted alkyl (wherein 1 or 2 of the non-terminal carbon atoms are optionally substituted by (un)substituted NH, O, S, SO, SO2), alkenyl, etc.; R8, R9 = H, C1, F, CF3, alkoxy, alkyl], useful in the treatment of conditions mediated by the action of PGE2 at EP1 receptors, were prepared E.g., a multi-step synthesis of II, was given. The compds. I had an antagonist pIC50 value of 6.5 to 9.5 at EP1 receptors and pIC50 of < 6.0 at EP3 receptors. The pharmaceutical composition comprising the compound I is disclosed.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 15 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 15
ACCESSION NUMBER: 2005:371223 ZCAPLUS Full-text
DOCUMENT NUMBER: 142:430146
TITLE: Preparation of cyclopentene compounds which bind with high affinity to the EP1 receptor
INVENTOR(S): Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel; Kilford, Ian Reginald; Lewell, Xiao Qing; Naylor, Alan; Novelli, Riccardo
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 201 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005037793 | A1 | 20050428 | WO 2004-EP11364 | 20041006 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1670763 | A1 | 20060621 | EP 2004-765925 | 20041006 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| JP 2007509039 | T | 20070412 | JP 2006-530139 | 20041006 |
| PRIORITY APPLN. INFO.: | | | GB 2003-23581 A | 20031008 |
| | | | WO 2004-EP11364 W | 20041006 |

OTHER SOURCE(S): CASREACT 142:430146; MARPAT 142:430146
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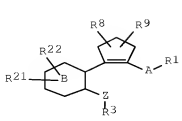

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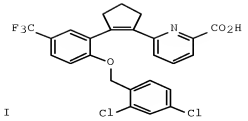

II

AB The title compds. I [A = (un)substituted aryl, 5-6 membered heterocyclyl, bicyclic heterocyclyl; B = Ph, pyridyl; Z = O, S, SO, SO2; R1 = CO2H, CN, CH2CO2H, etc.; R21, R22 = H, halo, alkyl, etc.; R3 = (un)substituted alkyl (wherein 1 or 2 of the non-terminal carbon atoms are optionally substituted by (un)substituted NH, O, S, SO, SO2), alkenyl, etc.; R8, R9 = H, Cl, F, CF3, alkoxy, alkyl], useful in the treatment of conditions mediated by the action of PGE2 at EP1 receptors, were prepared Thus, hydrolysis of (2,4-dichlorophenyl)methyl 6-{2-[2-{[(2,4- dichlorophenyl)methyl]oxy}-5-(trifluoromethyl)phenyl]-1-cyclopenten-1-yl}- 2-pyridinecarboxylate with 2M NaOH solution afforded II. The compds. I had an antagonist pIC50 value of 6.0 to 9.5 at EP1 receptors. The pharmaceutical composition comprising the compound I is disclosed.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 16 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 16

ACCESSION NUMBER: 2005:371217 ZCAPLUS Full-text

DOCUMENT NUMBER: 142:430145

TITLE: Preparation of heterocyclyl compounds which bind with high affinity to the EP1 receptor

INVENTOR(S): Giblin, Gerard Martin Paul; Hall, Adrian; Kilford, Ian Reginald; Lewell, Xiao Qing; Miller, Neil Derek; Naylor, Alan

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005037786 | A1 | 20050428 | WO 2004-EP11366 | 20041006 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1670756 | A1 | 20060621 | EP 2004-765926 | 20041006 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR

JP 2007508267 T 20070405 JP 2006-530141 20041006

PRIORITY APPLN. INFO.: GB 2003-23585 A 20031008

WO 2004-EP11366 W 20041006

OTHER SOURCE(S): CASREACT 142:430145; MARPAT 142:430145

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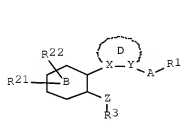

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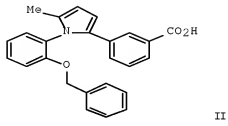


II

AB The title compds. I [A = (un)substituted aryl, 5-6 membered heterocyclyl, bicyclic heterocyclyl; B = Ph, pyridyl; D = (un)substituted 5-6 membered heterocyclyl ring containing one or two heteroatoms selected from N, S and O (wherein X and Y are selected from N and C); Z = O, S, SO, SO2; R1 = CO2H, CN, CH2CO2H, etc.; R21, R22 = H, halo, alkyl, etc.; R3 = (un)substituted alkyl (wherein 1 or 2 of the non-terminal carbon atoms are optionally substituted by (un)substituted NH, O, S, SO, SO2), alkenyl, etc.], useful in the treatment of conditions mediated by the action of PGE2 at EP1 receptors, were prepared Thus, heating Me 3-(4-oxopentanoyl)benzoate with 2-benzyloxyaniline.HCl at 120°C for 24 h followed by hydrolysis of the resulting ester with 2M NaOH afforded the benzoic acid II. The compds. I had an antagonist pIC50 value of > 6.0 at EP1 receptors and pIC50 of < 6.0 at EP3 receptors. The pharmaceutical composition comprising the compound I is disclosed.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 17 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 17

ACCESSION NUMBER: 2004:799566 ZCAPLUS Full-text

DOCUMENT NUMBER: 141:314325

TITLE: Preparation of 3-(imidazol-1-yl)benzoic acid derivatives for the treatment of conditions mediated by the action of PGE2 at EP1 receptors

INVENTOR(S): Giblin, Gerard Martin Paul; Hall, Adrian; Lewell, Xiao Qing; Miller, Neil Derek

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

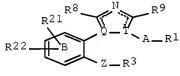
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004083185 | A2 | 20040930 | WO 2004-EP2831 | 20040317 |
| WO 2004083185 | A3 | 20041104 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG

PRIORITY APPLN. INFO.: GB 2003-6329 A 20030319
OTHER SOURCE(S): CASREACT 141:314325; MARPAT 141:314325
GI



I

AB The title compds. [I; A = (un)substituted aryl, 5-6 membered heterocyclyl, bicyclic heterocyclyl; B = Ph, pyridyl; Z = O, S, SO, SO2; R1 = CN, alkyl, COalkyl, SO2alkyl, etc.; R21, R22 = H, halo, alkyl, alkoxy, etc.; R3 = alkyl wherein 1 or 2 of the non-terminal carbon atoms are optionally replaced by NH, N(alkyl), O, and SOn; n = 0-2; either Q = C and T = N; or Q = N and T = C; R8, R9 = H, halo, alkyl, CF3; with proviso], were prepared E.g., a 2-step synthesis of 3-[5-(2-benzyloxyphenyl)imidazol-1-yl]benzoic acid, starting from 2-benzyloxybenzaldehyde, Et 3-aminobenzoate and tosylmethyl isocyanide, was given. The exemplified compds. I had an antagonist pIC50 value of between 7.0 and 9.5 at EP1 receptors and pIC50 value of <6.0 at EP3 receptors. The pharmaceutical composition comprising the compound I is claimed.

L49 ANSWER 18 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 18
ACCESSION NUMBER: 2004:390204 ZCAPLUS Full-text
DOCUMENT NUMBER: 140:406635
TITLE: Preparation of benzoic acids and related compounds as EP1 receptor antagonists for the treatment of prostaglandin mediated diseases.
INVENTOR(S): Bit, Rino Antonio; Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel; Kilford, Ian Reginald; Miller, Neil Derek; Scoccitti, Tiziana
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004039753 | A2 | 20040513 | WO 2003-EP12181 | 20031030 |
| WO 2004039753 | A3 | 20040715 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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|---|---|---|---|---|---|
| AU 2003287979 | A1 | 20040525 | AU 2003-287979 | | 20031030 |
| EP 1556330 | A2 | 20050727 | EP 2003-779828 | | 20031030 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | | |
| JP 2006504767 | T | 20060209 | JP 2004-547644 | | 20031030 |
| US 20060235057 | A1 | 20061019 | US 2005-533036 | | 20050428 |
| PRIORITY APPLN. INFO.: | | | GB 2002-25548 | A | 20021101 |
| | | | WO 2003-EP12181 | W | 20031030 |

OTHER SOURCE(S): MARPAT 140:406635

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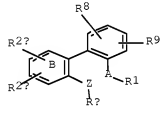



I

AB Title compds. I [A = (un)substituted aryl, 5 or 6-membered heterocyclyl ring, bicyclic heterocyclyl; B = Ph, pyridyl; Z = O, S, SO, etc.; R1 = CO2R4, CN, CONR5R6, etc.; R2a, R2b = H, halogen, (un)substituted alkyl, etc.; Rx = (un)substituted alkyl, CQaQb-heterocyclyl, CQaQb-bicyclic heterocyclyl, etc.; R4, R5 = H, (un)substituted alkyl; R6 = H, (un)substituted alkyl, heteroaryl, etc.; R8, R9 = H, Cl, F, etc.; Qa, Qb = H, CH3] and their pharmaceutically acceptable derivs. were prepared For example, the Suzuki coupling of Et 2'-bromobiphenyl-3-carboxylate and 2-benzyloxy-5-chlorophenylboronic acid, e.g., prepared from 3-ethoxycarbonylphenylboronic acid, followed by hydrolysis afforded compound I [A-R1 = 3-carboxyphenyl; Z = O; R2a = H, R2b = 5-Cl; R8, R9 = H] in 39% overall yield. In human prostanoid EP1 receptor binding assays, 90-examples of compds. I exhibited pIC50 values ranging from 6.0->9.0 at the EP1 receptor and pIC50 values of <6.0 at the EP3 receptor. Of note, no toxicol. effects are indicated/expected (sic) when the compds. I are administered at the assay concentration of 3 nM. Compds. I are claimed useful for the treatment of prostaglandin mediated diseases, e.g., inflammation, pain, etc.

L49 ANSWER 19 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 19

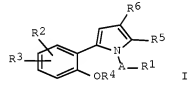
| | |
|---|---|
| ACCESSION NUMBER: | 2003:972053 ZCAPLUS Full-text |
| DOCUMENT NUMBER: | 140:27757 |
| TITLE: | Preparation of pyrroles for the treatment of prostaglandin mediated diseases |
| INVENTOR(S): | Gibbin, Gerard Martin Paul; Hall, Adrian; Healy, |

Mark Patrick; Lewell, Xiao Qing; Miller, Neil Derek; Novelli, Riccardo

PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 275 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003101959 | A1 | 20031211 | WO 2003-EP5790 | 20030530 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003238455 | A1 | 20031219 | AU 2003-238455 | 20030530 |
| EP 1509499 | A1 | 20050302 | EP 2003-732522 | 20030530 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2005532347 | T | 20051027 | JP 2004-509653 | 20030530 |
| US 20070082912 | A1 | 20070412 | US 2004-516230 | 20041129 |
| PRIORITY APPLN. INFO.: | | | GB 2002-12785 A | 20020531 |
| | | | WO 2003-EP5790 W | 20030530 |

OTHER SOURCE(S): MARPAT 140:27757
GI



I

AB The title compds. [I; A = (un)substituted aryl, 5-6 membered heterocyclyl, bicyclic heterocyclyl; R1 = CO2H, CN, CH2CO2H, alkyl, etc.; R2, R3 = H, halo, alkyl, alkoxy, etc.; R4 = (un)substituted alkyl wherein 1 or 2 of the non-terminal carbon atoms may optionally be replaced by a O, (un)substituted NH, SOn (n = 0-2); R5, R6 = H, CF3, alkyl] which bind with high affinity to the EP1 receptors, and are useful in medicine, in particular in the treatment of prostaglandin mediated diseases such as pain, inflammatory, immunol., bone, neurodegenerative or renal disorder, were prepared Preparation of 394 compds. I is described in detail. E.g., a 3-step synthesis of 3-[2-(2-benzyloxyphenyl)-5-methylpyrrol-1-yl]benzoic acid (starting from 2-benzyloxybenzaldehyde and Me vinyl ketone), was given. The exemplified compds. I had an antagonist pIC50 of 7.0-9.5 at EP1 receptors and pIC50 of <

6.0 at EP3 receptors. The pharmaceutical composition comprising the title compound I is claimed.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 20 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 20

ACCESSION NUMBER: 2003:818387 ZCAPLUS Full-text

DOCUMENT NUMBER: 139:323536

TITLE: Preparation of [2-(2-alkoxyphenyl)cyclopent-1-enyl] substituted (hetero)aromatic carboxylic acids with high affinity to the EP1 receptor

INVENTOR(S): Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel; Kilford, Ian Reginald; Lewell, Xiao Qing; Naylor, Alan; Novelli, Riccardo

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 180 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

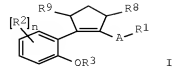
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003084917 | A1 | 20031016 | WO 2003-EP3661 | 20030407 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2481035 | A1 | 20031016 | CA 2003-2481035 | 20030407 |
| AU 2003216920 | A1 | 20031020 | AU 2003-216920 | 20030407 |
| EP 1492757 | A1 | 20050105 | EP 2003-712136 | 20030407 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003009014 | A | 20050111 | BR 2003-9014 | 20030407 |
| JP 2005522477 | T | 20050728 | JP 2003-582116 | 20030407 |
| CN 1659131 | A | 20050824 | CN 2003-812587 | 20030407 |
| ZA 2004007105 | A | 20060726 | ZA 2004-7105 | 20040906 |
| US 20050239802 | A1 | 20051027 | US 2004-508761 | 20040922 |
| US 7232821 | B2 | 20070619 | | |
| MX 2004PA09800 | A | 20041213 | MX 2004-PA9800 | 20041007 |
| NO 2004004689 | A | 20041029 | NO 2004-4689 | 20041029 |

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| GB 2002-8045 | A | 20020408 |
| GB 2003-2881 | A | 20030207 |
| WO 2003-EP3661 | W | 20030407 |

OTHER SOURCE(S): MARPAT 139:323536

GI



I

AB The title compds. [I; A = (un)substituted Ph, 5-6 membered heterocyclyl, bicyclic heterocyclyl; R1 = CO2R4, CONR5R6, CH2CO2R4, alkyl, etc.; R2 = halo, alkyl, CN, etc.; R3 = alkyl wherein 1 or 2 of the non-terminal carbon atoms may optionally be replaced by NR4, O, SOn (n = 0-2), etc.; R4, R5 = H, alkyl; R6 = H, alkyl, SO2aryl, etc.; R8, R9 = H, alkyl; n = 0-2], useful for treating condition which is mediated by the action of PGE2 at EP1 receptors, were prepared E.g., a multi-step synthesis of [2-(5-chloro-2-benzyloxyphenyl)cyclopent-1-enyl]benzoic acid (starting from 1,2-dibromocyclopentene and (3-ethoxycarbonylphenyl)boronic acid), was given. The compds. I had an antagonist pIC50 value of between 7.0 and 9.5 at EP1 receptors and pIC50 value of <6.0 at EP3 receptors. Pharmaceutical composition comprising the compound I is claimed.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 21 OF 22 ZCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:69949 ZCAPLUS Full-text
DOCUMENT NUMBER: 148:168572
TITLE: Indole derivatives as EP1 ligands, their preparation, pharmaceutical compositions, and use in therapy
INVENTOR(S): Hall, Adrian; Hurst, David Nigel; Scoccitti, Tiziana; Theobald, Pamela Joan
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 63pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2008006793 | A1 | 20080117 | WO 2007-EP56942 | 20070709 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: GB 2006-14070 A 20060714
OTHER SOURCE(S): MARPAT 148:168572
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to indole derivs. of formula I, which are ligands for the prostanoid EP1 receptor. In compds. I, R1 is CF3, Cl, or Br; R2 is iso-Pr, iso-Bu, or 3,3-dimethylbutyl; R3 is substituted oxazolyl, substituted thiazolyl, or substituted thiazolylmethyl; and X is CH or N. The invention also relates to the preparation of I, pharmaceutical compns. comprising a compound I together with a pharmaceutical carrier and/or excipient, as well as to the use of the compns. for the treatment of conditions mediated by the action of prostaglandin E2 (PGE2) on the EP1 receptor, such as pain, inflammatory disorders, and neurodegenerative disorders. Acylation of 6-chloroindole with isobutyryl chloride followed by hydride reduction and substitution of Et 2-bromothiazole-4-carboxylate resulted in the formation of N-thiazolylindole II, which underwent ester hydrolysis and amidation with 2-aminobenzyl alc. to give N-(carbamoylthiazolyl)indole III. Several compds. of the invention, e.g., III, expressed pIC50 values above 7 for their affinity towards the prostanoid EP1 receptor and pKi values above 7.0 in a human EP1 calcium mobilization functional assay.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 22 OF 22 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2007:426422 BIOSIS Full-text
DOCUMENT NUMBER: PREV200700425637
TITLE: (2-((2-alkoxy)-phenyl) -cyclopent-1enyl) aromatic carbo and heterocyclic acid and derivatives.
AUTHOR(S): Anonymous; Giblin, Gerard Martin Paul [Inventor]; Hall, Adrian [Inventor]; Hurst, David Nigel [Inventor]; Kilford, Ian Reginald [Inventor]; Lewell, Xiao Qing [Inventor]; Naylor, Alan [Inventor]; Novelli, Riccardo [Inventor]
CORPORATE SOURCE: Welwyn, United Kingdom
ASSIGNEE: Glaxo Group Limited
PATENT INFORMATION: US 07232821 20070619
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (JUN 19 2007)
CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Aug 2007
Last Updated on STN: 8 Aug 2007
ABSTRACT:Compounds of formula (I) or a pharmaceutically acceptable derivative thereof: wherein A, R-1, R-2, R-x, R-8, R(9 )and n are as defined in the specification, a process for the preparation of such compounds, pharmaceutical compositions comprising such compounds and the use of such compounds in medicine.
NAT. PATENT. CLASSIF.:514239500
CONCEPT CODE: Pathology - Therapy 12512
Pharmacology - General 22002
Pharmacology - Drug metabolism and metabolic stimulators 22003
INDEX TERMS: Major Concepts
Pharmacology
INDEX TERMS: Chemicals & Biochemicals

(2-((2-alkoxy)-phenyl)-cyclopent-1enyl) aromatic carbo derivatives: metabolic-drug; (2-((2-alkoxy)-phenyl)-cyclopent-1enyl) aromatic heterocyclic acid derivatives: metabolic-drug

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DICTIONARY FILE UPDATES:  11 MAY 2008  HIGHEST RN 1020256-26-1

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http://www.cas.org/support/stngen/stndoc/properties.html

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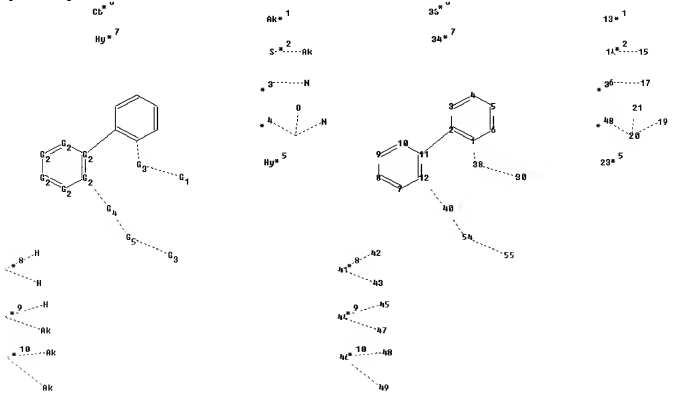

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47  48  49  54  55
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ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12
chain bonds :
1-38  2-11  12-40  14-15  16-17  18-20  19-20  20-21  30-38  40-54  41-42  41-43
44-45  44-47  46-48  46-49  54-55
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8  7-12  8-9  9-10  10-11  11-12
exact/norm bonds :
1-38  2-11  7-8  7-12  8-9  9-10  10-11  11-12  12-40  14-15  16-17  18-20  19-20
20-21  30-38  40-54  41-42  41-43  44-45  44-47  46-48  46-49  54-55
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6


G1:[*1],[*2],[*3],[*4],[*5]

G2:C,N

G3:[*6],[*7]

G4:O,S

G5:[*8],[*9],[*10]

Connectivity :
21:1 E exact RC ring/chain
Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS  18:CLASS
19:CLASS  20:CLASS  21:CLASS
23:Atom  30:CLASS  33:Atom  34:Atom  38:CLASS  40:CLASS  41:CLASS  42:CLASS
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Generic attributes :
33:
Saturation             : Unsaturated



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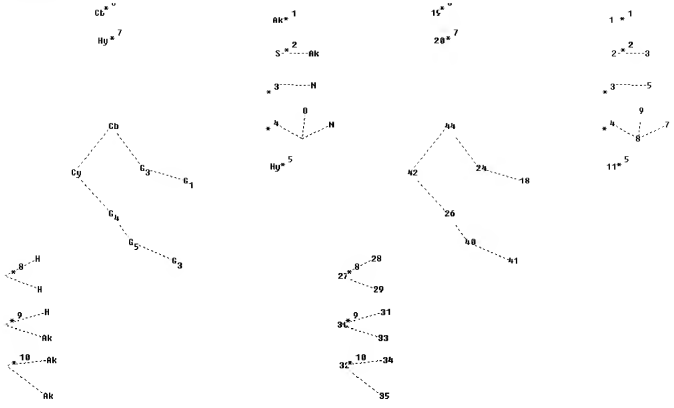


chain nodes :
1 2 3 4 5 6 7 8 9 11 18 19 20 24 26 27 28 29 30 31 32 33 34 35 40 41 42 44
chain bonds :
2-3 4-5 6-8 7-8 8-9 18-24 24-44 26-40 26-42 27-28 27-29 30-31 30-33 32-34 32-35 40-41 42-44
exact/norm bonds :
2-3 4-5 6-8 7-8 8-9 18-24 24-44 26-40 26-42 27-28 27-29 30-31 30-33 32-34 32-35 40-41 42-44

G1:[*1],[*2],[*3],[*4],[*5]

G3:[*6],[*7]

G4:O,S

G5:[*8],[*9],[*10]

Connectivity :
9:1 E exact RC ring/chain 42:4 X maximum RC ring/chain 44:4 X maximum RC ring/chain

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 11:Atom 18:CLASS 19:Atom 20:Atom 24:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 40:CLASS 41:CLASS 42:Atom 44:Atom
Generic attributes :
19:
Saturation : Unsaturated
42:

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Saturation              : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System     : Monocyclic
44:
Saturation              : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System     : Monocyclic

Element Count :
Node 42: Limited
    C,C5-6
    N,N0-1
    S,S0
    O,O0
    P,P0

Node 44: Limited
    C,C6



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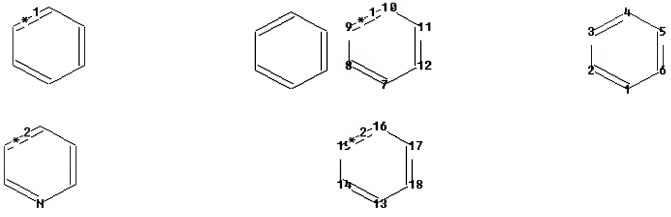
G1 23

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chain nodes :
23
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8  7-12  8-9  9-10  10-11  11-12  13-14  13-18  14-
15
15-16  16-17  17-18
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8  7-12  8-9  9-10  10-11  11-12  13-14  13-18  14-
15
15-16  16-17  17-18
isolated ring systems :
containing 1 : 7 : 13 :


G1:[*1],[*2]
```

```
Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
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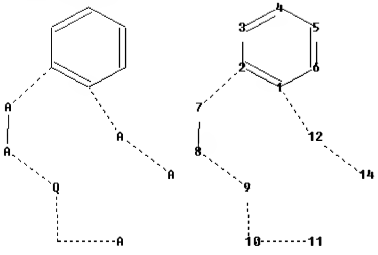


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chain nodes :
9  10
ring nodes :
1  2  3  4  5  6  7  8  11  12  14
chain bonds :
1-12  2-7  8-9  9-10  10-11
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8  12-14
exact/norm bonds :
1-12  2-7  8-9  9-10  10-11  12-14
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8
isolated ring systems :
containing 1 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:CLASS  10:CLASS
11:Atom  12:Atom  14:Atom



=> file zcaplus
FILE 'ZCAPLUS' ENTERED AT 10:30:27 ON 12 MAY 2008
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FILE COVERS 1907 - 12 May 2008 VOL 148 ISS 20
FILE LAST UPDATED: 11 May 2008 (20080511/ED)

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This file contains CAS Registry Numbers for easy and accurate
substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

=> d stat que L21
L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L3 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L4 STR

G1


G1 [@1],[@2]

Structure attributes must be viewed using STN Express query preparation.
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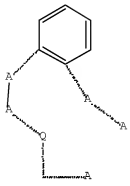
L6 SCR 1946
L7 5110201 SEA FILE=REGISTRY ABB=ON PLU=ON 46.150.18/RID AND NRS>3
L9 STR



Structure attributes must be viewed using STN Express query preparation.

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L20 151 SEA FILE=REGISTRY ABB=ON PLU=ON L11 AND L16

L21 3 SEA FILE=ZCAPLUS ABB=ON PLU=ON L20

=> d ibib abs hitstr L21 1-3

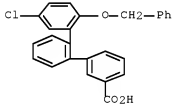
L21 ANSWER 1 OF 3 ZCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:315138 ZCAPLUS Full-text
DOCUMENT NUMBER: 144:480399

TITLE: Discovery of novel biaryl heterocyclic EP1 receptor antagonists
AUTHOR(S): Hall, Adrian; Bit, Rino A.; Brown, Susan H.; Chaignot, Helene M.; Chessell, Iain P.; Coleman, Tanya; Giblin, Gerard M. P.; Hurst, David N.; Kilford, Ian R.; Lewell, Xiao Q.; Michel, Anton D.; Mohamed, Shiyam; Naylor, Alan; Novelli, Riccardo; Skinner, Lee; Spalding, David J.; Tang, Sac P.; Wilson, Richard J.
CORPORATE SOURCE: Neurology and Gastrointestinal Centre of Excellence for Drug Discovery, GlaxoSmithKline, Essex, CM19 5AW, UK
SOURCE: Bioorganic & Medicinal Chemistry Letters (2006), 16(10), 2666-2671
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:480399

AB We describe the generation of novel EP1 receptor antagonists by investigation of thiophene isosteres. In addition, we disclose preliminary in vitro and in vivo DMPK for selected compds.

IT 690259-48-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Discovery of novel biaryl heterocyclic EP1 receptor antagonists)

RN 690259-48-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



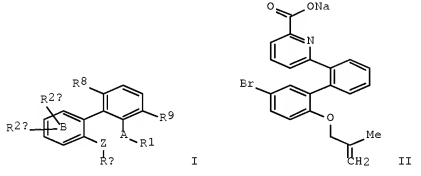

REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 2 OF 3 ZCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1220712 ZCAPLUS Full-text
DOCUMENT NUMBER: 143:477851
TITLE: Preparation of sodium 6-(2-biphenyl)-2-pyridinecarboxylates for treating conditions mediated by the action of PGE2 at the EP1 receptor
INVENTOR(S): Bit, Rino Antonio; Giblin, Gerard Martin Paul; Hall, Adrian; Hayhow, Thomas; Hurst, David Nigel; Kilford, Ian Reginald; Miller, Neil Derek; Naylor, Alan; Novelli, Riccardo; Scoccitti, Tiziana
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005108369 | A1 | 20051117 | WO 2005-EP4726 | 20050429 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1742916 | A1 | 20070117 | EP 2005-738052 | 20050429 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, LV | | | | |
| JP 2007536309 | T | 20071213 | JP 2007-511989 | 20050429 |
| US 20070225340 | A1 | 20070927 | US 2006-568573 | 20061102 |
| PRIORITY APPLN. INFO.: | | | GB 2004-10121 A | 20040506 |
| | | | WO 2005-EP4726 W | 20050429 |

OTHER SOURCE(S): MARPAT 143:477851
GI




AB The title compds. I [A = (un)substituted aryl, 5-6 membered heterocyclyl, bicyclic heterocyclyl; B = Ph, pyridyl; Z = O, S, SO, SO2; R1 = CO2H, CN, COalkyl, etc.; R2a, R2b = H, halo, CN, etc.; Rx = (un)substituted alkyl [wherein 1 or 2 of the non-terminal carbon atoms are optionally replaced by NR4, O or SOn (wherein n = 0-2)], (un)substituted alkenyl, (un)substituted alkynyl, etc.; R8, R9 = H, halo, CF3, alkoxy, alkyl], useful in the treatment of conditions mediated by the action of PGE2 at the EP1 receptor (which is associated with smooth muscle contraction, pain (in particular inflammatory, neuropathic and visceral), inflammation, allergic activities, renal regulation and gastric or enteric mucus secretion), were prepared Thus, treating suspension of Et 6-{5'-bromo-2'-[(2-methyl-2-propen-1-yl)oxy]-2-biphenylyl}-2-

pyridinecarboxylate in EtOH with 1M NaOH afforded II. The exemplified compds. I showed an antagonist pIC50 of 6.0 or greater at EP2 receptors. The pharmaceutical composition comprising the compound I is disclosed.

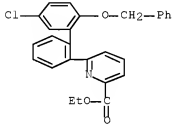
IT 690261-30-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of sodium 6-(2-biphenyl)-2-pyridinecarboxylates for treating conditions mediated by the action of PGE2 at the EP1 receptor)

RN 690261-30-4 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 3 ZCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:390204 ZCAPLUS Full-text

DOCUMENT NUMBER: 140:406635

TITLE: Preparation of benzoic acids and related compounds as EP1 receptor antagonists for the treatment of prostaglandin mediated diseases.

INVENTOR(S): Bit, Rino Antonio; Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel; Kilford, Ian Reginald; Miller, Neil Derek; Scoccitti, Tiziana

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004039753 | A2 | 20040513 | WO 2003-EP12181 | 20031030 |
| WO 2004039753 | A3 | 20040715 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

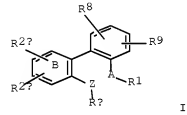
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,

TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | | |
|---|---|---|---|---|---|
| AU 2003287979 | A1 | 20040525 | AU 2003-287979 | | 20031030 |
| EP 1556330 | A2 | 20050727 | EP 2003-779828 | | 20031030 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | | |
| JP 2006504767 | T | 20060209 | JP 2004-547644 | | 20031030 |
| US 20060235057 | A1 | 20061019 | US 2005-533036 | | 20050428 |
| PRIORITY APPLN. INFO.: | | | GB 2002-25548 | A | 20021101 |
| | | | WO 2003-EP12181 | W | 20031030 |

OTHER SOURCE(S): MARPAT 140:406635

GI




I

AB Title compds. I [A = (un)substituted aryl, 5 or 6-membered heterocyclyl ring, bicyclic heterocyclyl; B = Ph, pyridyl; Z = O, S, SO, etc.; R1 = CO2R4, CN, CONR5R6, etc.; R2a, R2b = H, halogen, (un)substituted alkyl, etc.; Rx = (un)substituted alkyl, CQaQb-heterocyclyl, CQaQb-bicyclic heterocyclyl, etc.; R4, R5 = H, (un)substituted alkyl; R6 = H, (un)substituted alkyl, heteroaryl, etc.; R8, R9 = H, Cl, F, etc.; Qa, Qb = H, CH3] and their pharmaceutically acceptable derivs. were prepared For example, the Suzuki coupling of Et 2'-bromobiphenyl-3-carboxylate and 2-benzyloxy-5-chlorophenylboronic acid, e.g., prepared from 3-ethoxycarbonylphenylboronic acid, followed by hydrolysis afforded compound I [A-R1 = 3-carboxyphenyl; Z = O; R2a = H, R2b = 5-Cl; R8, R9 = H] in 39% overall yield. In human prostanoid EP1 receptor binding assays, 90-examples of compds. I exhibited pIC50 values ranging from 6.0->9.0 at the EP1 receptor and pIC50 values of <6.0 at the EP3 receptor. Of note, no toxicol. effects are indicated/expected (sic) when the compds. I are administered at the assay concentration of 3 nM. Compds. I are claimed useful for the treatment of prostaglandin mediated diseases, e.g., inflammation, pain, etc.

IT 690259-48-4P 690259-49-5P 690259-50-8P
690259-51-9P 690259-52-0P 690259-53-1P
690259-54-2P 690259-55-3P 690259-56-4P
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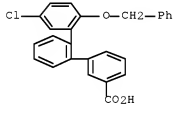
690260-31-2P 690260-32-3P 690260-33-4P
690260-34-5P 690260-35-6P 690260-36-7P
690260-37-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzoic acids and related compds. as EP1 receptor antagonists for the treatment of prostaglandin mediated diseases.)

RN 690259-48-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)

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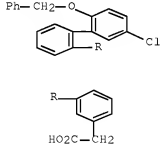
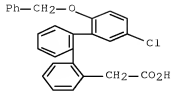
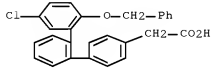



RN 690259-50-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-acetic acid, 5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



RN 690259-51-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-4-acetic acid, 5''-chloro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



RN 690259-52-0 ZCAPLUS
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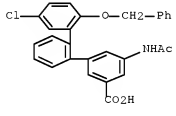

RN 690259-53-1 ZCAPLUS
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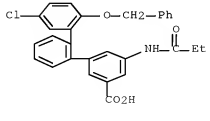
oxopropyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



RN 690259-54-2 ZCAPLUS
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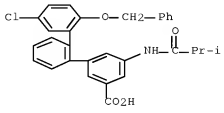

RN 690259-55-3 ZCAPLUS
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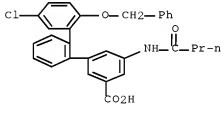

RN 690259-56-4 ZCAPLUS
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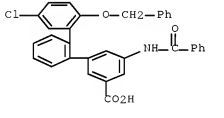
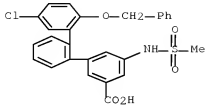
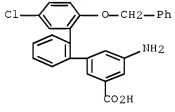


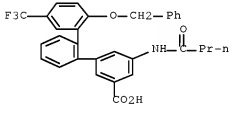
RN 690259-57-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(methylsulfonyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



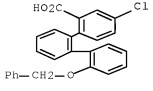
RN 690259-58-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-amino-5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



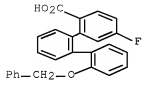
RN 690259-59-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[(1-oxobutyl)amino]-2''-(phenylmethoxy)-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



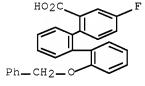
RN 690259-60-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



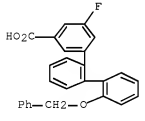
RN 690259-61-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5-fluoro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



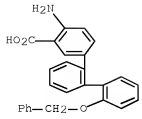

RN 690259-62-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-fluoro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



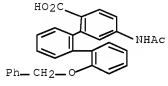

RN 690259-63-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-fluoro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



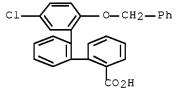

RN 690259-64-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 4-amino-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



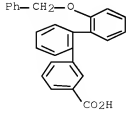
RN 690259-65-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5-(acetylamino)-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



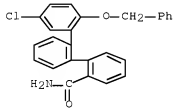
RN 690259-66-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-(9CI) (CA INDEX NAME)



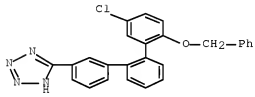
RN 690259-67-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



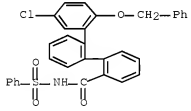
RN 690259-68-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxamide, 5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



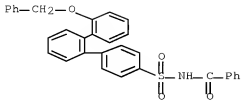
RN 690259-69-9 ZCAPLUS
CN 1H-Tetrazole, 5-[5''-chloro-2''-(phenylmethoxy)[1,1':2',1''-terphenyl]-3-yl]- (9CI) (CA INDEX NAME)



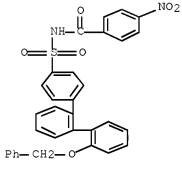
RN 690259-70-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxamide, 5''-chloro-2''-(phenylmethoxy)-N-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



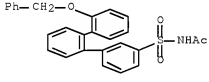
RN 690259-71-3 ZCAPLUS
CN Benzamide, N-[[2''-(phenylmethoxy)[1,1':2',1''-terphenyl]-4-yl]sulfonyl]- (9CI) (CA INDEX NAME)



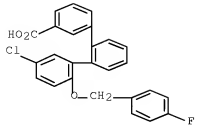
RN 690259-72-4 ZCAPLUS
CN Benzamide, 4-nitro-N-[[2''-(phenylmethoxy)[1,1':2',1''-terphenyl]-4-yl]sulfonyl]- (9CI) (CA INDEX NAME)



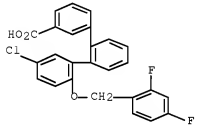
RN 690259-73-5 ZCAPLUS
CN Acetamide, N-[[2''-(phenylmethoxy)[1,1':2',1''-terphenyl]-3-yl]sulfonyl]- (9CI) (CA INDEX NAME)



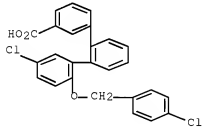
RN 690259-75-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-fluorophenyl)methoxy]- (9CI) (CA INDEX NAME)



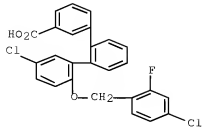
RN 690259-76-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(2,4-difluorophenyl)methoxy]- (9CI) (CA INDEX NAME)



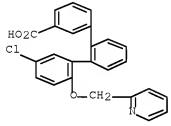
RN 690259-77-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-chlorophenyl)methoxy]- (9CI) (CA INDEX NAME)



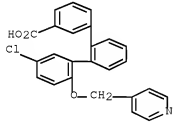
RN 690259-78-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-chloro-2-fluorophenyl)methoxy]- (9CI) (CA INDEX NAME)



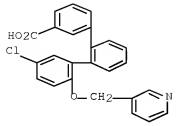

RN 690259-80-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(2-pyridinylmethoxy)- (9CI) (CA INDEX NAME)



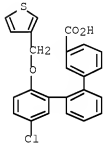

RN 690259-81-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(4-pyridinylmethoxy)- (9CI) (CA INDEX NAME)



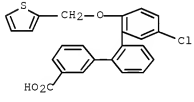

RN 690259-82-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(3-pyridinylmethoxy)- (9CI) (CA INDEX NAME)



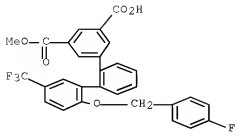
RN 690259-84-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(3-thienylmethoxy)- (9CI) (CA INDEX NAME)



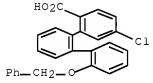
RN 690259-85-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(2-thienylmethoxy)- (9CI) (CA INDEX NAME)



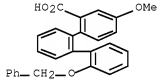
RN 690259-91-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3,5-dicarboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)-, monomethyl ester (9CI) (CA INDEX NAME)



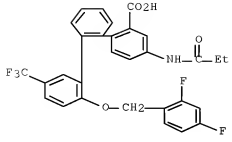
RN 690259-92-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5-chloro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



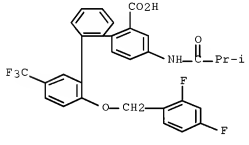
RN 690259-93-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-methoxy-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



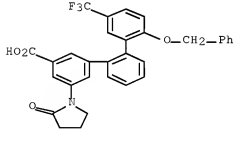
RN 690259-94-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-
difluorophenyl)methoxy]-4-[(1-oxopropyl)amino]-5''-(trifluoromethyl)-
(9CI) (CA INDEX NAME)



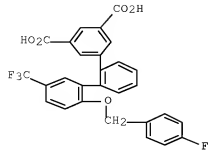
RN 690259-95-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-[(2-methyl-1-oxopropyl)amino]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



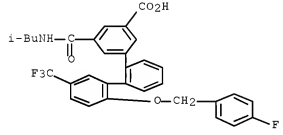
RN 690259-96-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(2-oxo-1-pyrrolidinyl)-2''-(phenylmethoxy)-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



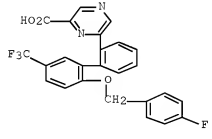
RN 690259-97-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3,5-dicarboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



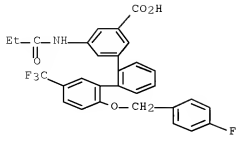
RN 690259-98-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[[(2-methylpropyl)amino]carbonyl]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



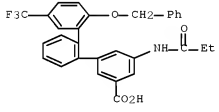
RN 690259-99-5 ZCAPLUS
CN 2-Pyrazinecarboxylic acid, 6-[2'-[(4-fluorophenyl)methoxy]-5'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)



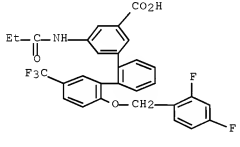
RN 690260-00-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[(1-oxopropyl)amino]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



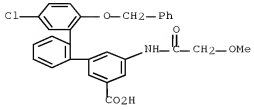
RN 690260-01-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[(1-oxopropyl)amino]-2''-(phenylmethoxy)-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



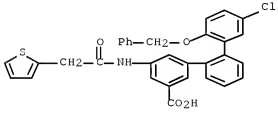
RN 690260-02-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(2,4-fluorophenyl)methoxy]-5-[(1-oxopropyl)amino]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



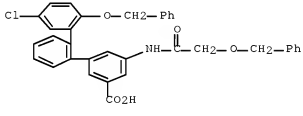
RN 690260-03-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(methoxyacetyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



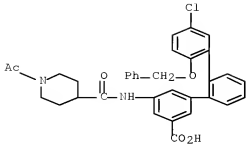
RN 690260-04-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-5-[(2-thienylacetyl)amino]- (9CI) (CA INDEX NAME)



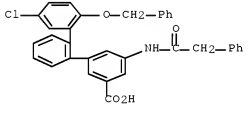
RN 690260-05-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-5-[[(phenylmethoxy)acetyl]amino]- (9CI) (CA INDEX NAME)



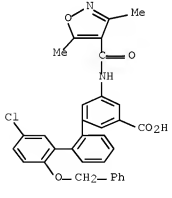
RN 690260-06-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[[(1-acetyl-4-piperidinyl)carbonyl]amino]-5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



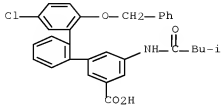
RN 690260-07-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5'''-chloro-5-[(phenylacetyl)amino]-2'''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



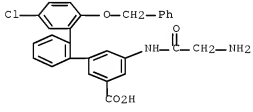
RN 690260-08-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5'''-chloro-5-[[(3,5-dimethyl-4-isoxazolyl)carbonyl]amino]-2'''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



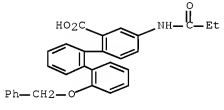
RN 690260-09-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(3-methyl-1-oxobutyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



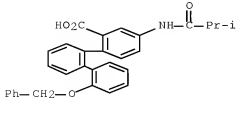
RN 690260-10-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[(aminoacetyl)amino]-5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



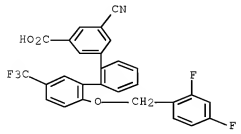
RN 690260-11-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-[(1-oxopropyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



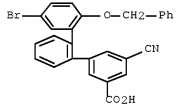
RN 690260-12-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-[(2-methyl-1-oxopropyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



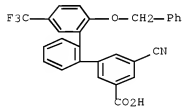
RN 690260-13-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-cyano-2''-[(2,4-difluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



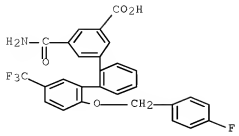
RN 690260-14-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-bromo-5-cyano-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



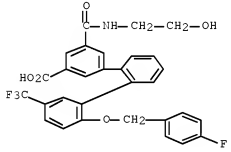
RN 690260-15-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-cyano-2''-(phenylmethoxy)-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



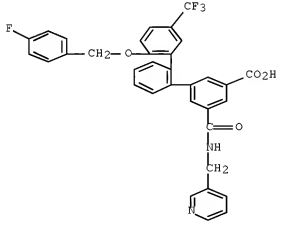
RN 690260-16-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(aminocarbonyl)-2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 690260-17-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[[(2-hydroxyethyl)amino]carbonyl]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)

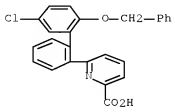


RN 690260-18-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[[(3-pyridinylmethyl)amino]carbonyl]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



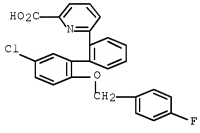
RN 690260-19-6 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)



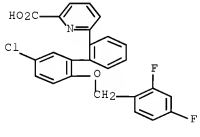
RN 690260-20-9 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(4-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]- (CA INDEX NAME)



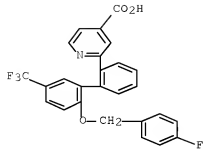
RN 690260-21-0 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2,4-difluorophenyl)methoxy][1,1'-biphenyl]-2-yl]- (CA INDEX NAME)

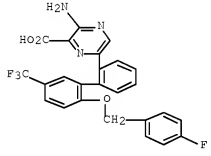


RN 690260-22-1 ZCAPLUS

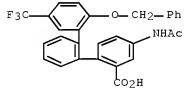
CN 4-Pyridinecarboxylic acid, 2-[2'-[(4-fluorophenyl)methoxy]-5'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)



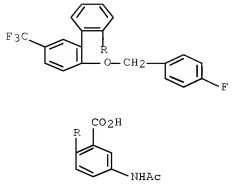
RN 690260-23-2 ZCAPLUS
CN 2-Pyrazinecarboxylic acid, 3-amino-6-[2'-[(4-fluorophenyl)methoxy]-5'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)



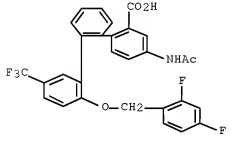
RN 690260-24-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-(phenylmethoxy)-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



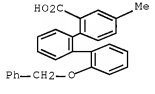
RN 690260-25-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



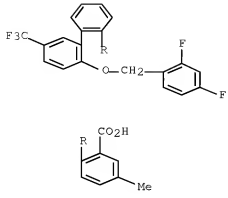
RN 690260-26-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-[(2,4-difluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



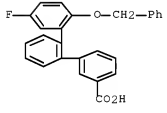
RN 690260-27-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-methyl-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



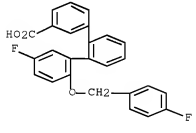
RN 690260-28-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-methyl-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



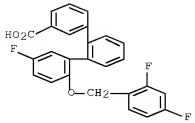

RN 690260-29-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-fluoro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



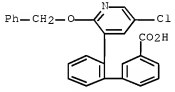

RN 690260-30-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-fluoro-2''-[(4-
fluorophenyl)methoxy]- (9CI) (CA INDEX NAME)



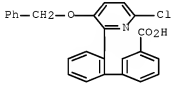

RN 690260-31-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(2,4-
difluorophenyl)methoxy]-5''-fluoro- (9CI) (CA INDEX NAME)



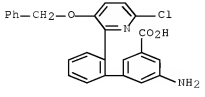
RN 690260-32-3 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 2'-[5-chloro-2-(phenylmethoxy)-3-pyridinyl]- (CA INDEX NAME)



RN 690260-33-4 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 2'-[6-chloro-3-(phenylmethoxy)-2-pyridinyl]- (CA INDEX NAME)

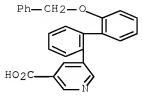


RN 690260-34-5 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 5-amino-2'-[6-chloro-3-(phenylmethoxy)-2-pyridinyl]- (CA INDEX NAME)

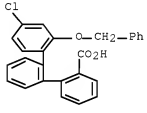


RN 690260-35-6 ZCAPLUS

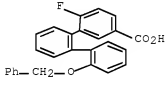
CN 3-Pyridinecarboxylic acid, 5-[2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]-
(CA INDEX NAME)



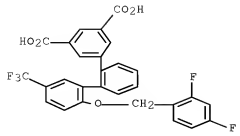

RN 690260-36-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4''-chloro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)




RN 690260-37-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 6-fluoro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)




IT 690261-75-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of benzoic acids and related compds. as EP1 receptor
antagonists for the treatment of prostaglandin mediated diseases.)
RN 690261-75-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3,5-dicarboxylic acid, 2''-[(2,4-
difluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



IT 690260-39-0P 690260-42-5P 690260-45-8P
690260-47-0P 690260-49-2P 690260-50-5P
690260-51-6P 690260-52-7P 690260-53-8P
690260-54-9P 690260-55-0P 690260-57-2P
690260-60-7P 690260-61-8P 690260-62-9P
690260-63-0P 690260-64-1P 690260-65-2P
690260-66-3P 690260-72-1P 690260-73-2P
690260-74-3P 690260-75-4P 690260-77-6P
690260-78-7P 690260-79-8P 690260-81-2P
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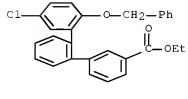
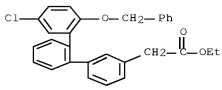
690261-07-5P 690261-08-6P 690261-09-7P
690261-10-0P 690261-12-2P 690261-13-3P
690261-14-4P 690261-15-5P 690261-16-6P
690261-17-7P 690261-18-8P 690261-19-9P
690261-20-2P 690261-21-3P 690261-22-4P
690261-23-5P 690261-24-6P 690261-25-7P
690261-26-8P 690261-27-9P 690261-30-4P
690261-32-6P 690261-33-7P 690261-36-0P
690261-37-1P 690261-40-6P 690261-41-7P
690261-42-8P 690261-44-0P 690261-45-1P
690261-48-4P 690261-49-5P 690261-50-8P
690261-52-0P 690261-55-3P 690261-56-4P
690261-57-5P 690261-61-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzoic acids and related compds. as EP1 receptor antagonists for the treatment of prostaglandin mediated diseases.)

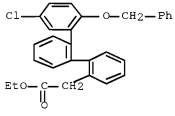
RN 690260-39-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



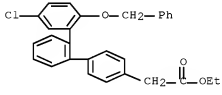
RN 690260-42-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-acetic acid, 5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



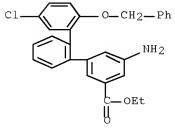
RN 690260-45-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-acetic acid, 5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



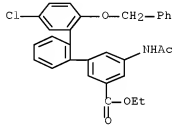
RN 690260-47-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-4-acetic acid, 5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



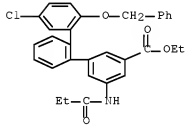
RN 690260-49-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-amino-5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



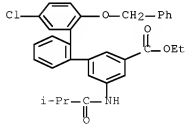
RN 690260-50-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(acetylamino)-5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



RN 690260-51-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(1-oxopropyl)amino]-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)

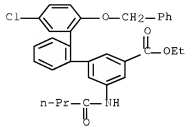


RN 690260-52-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(2-methyl-1-oxopropyl)amino]-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



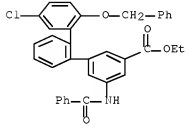
RN 690260-53-8 ZCAPLUS

CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(1-oxobutyl)amino]-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



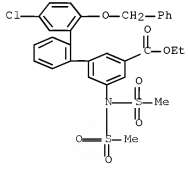
RN 690260-54-9 ZCAPLUS

CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(benzoylamino)-5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



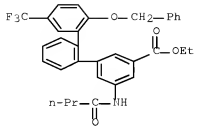
RN 690260-55-0 ZCAPLUS

CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[bis(methylsulfonyl)amino]-5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)

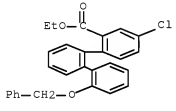


RN 690260-57-2 ZCAPLUS

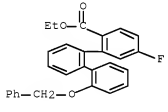
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[(1-oxobutyl)amino]-2''-(phenylmethoxy)-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



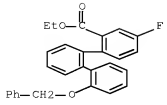
RN 690260-60-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



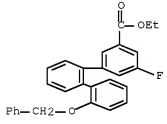
RN 690260-61-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5-fluoro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



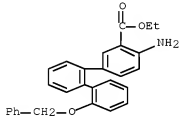
RN 690260-62-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-fluoro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



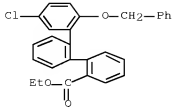
RN 690260-63-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-fluoro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



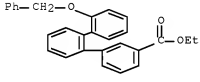
RN 690260-64-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 4-amino-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



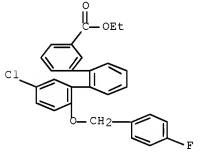
RN 690260-65-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



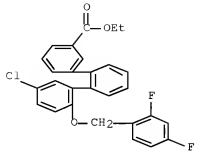
RN 690260-66-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



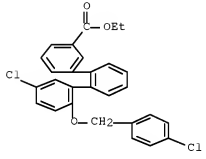
RN 690260-72-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-fluorophenyl)methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



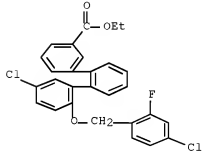
RN 690260-73-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(2,4-difluorophenyl)methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



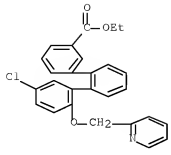
RN 690260-74-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-chlorophenyl)methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



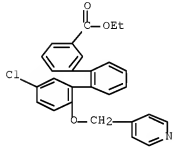
RN 690260-75-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-chloro-2-fluorophenyl)methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



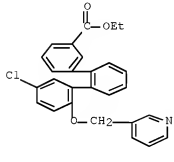
RN 690260-77-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(2-pyridinylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



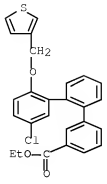
RN 690260-78-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(4-pyridinylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



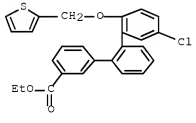
RN 690260-79-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(3-pyridinylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



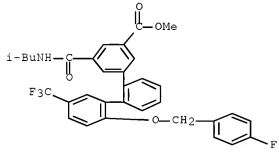
RN 690260-81-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(3-thienylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



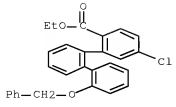
RN 690260-82-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(2-thienylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



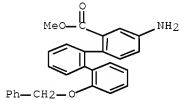
RN 690261-01-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[[(2-methylpropyl)amino]carbonyl]-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



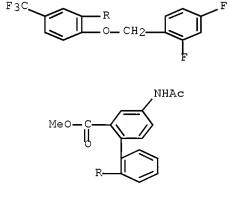
RN 690261-06-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



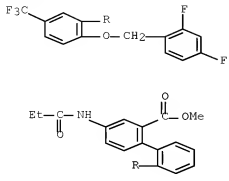
RN 690261-07-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-amino-2''-(phenylmethoxy)-, methyl ester (9CI) (CA INDEX NAME)



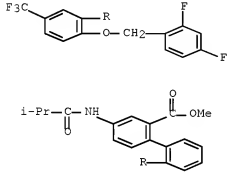
RN 690261-08-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-[(2,4-difluorophenyl)methoxy]-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



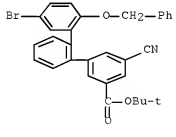
RN 690261-09-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-[(1-oxopropyl)amino]-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



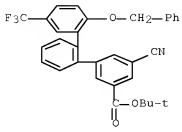
RN 690261-10-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-[(2-methyl-1-oxopropyl)amino]-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



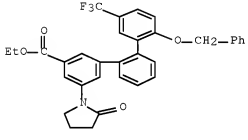
RN 690261-12-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-bromo-5-cyano-2''-(phenylmethoxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



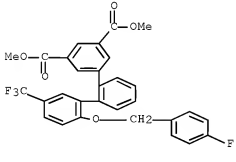
RN 690261-13-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-cyano-2''-(phenylmethoxy)-5''-(trifluoromethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



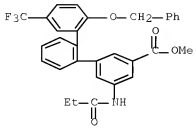
RN 690261-14-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(2-oxo-1-pyrrolidinyl)-2''-(phenylmethoxy)-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



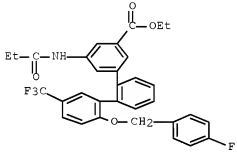
RN 690261-15-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3,5-dicarboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)-, dimethyl ester (9CI) (CA INDEX NAME)



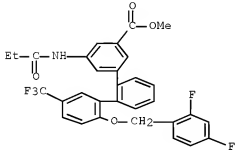
RN 690261-16-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[(1-oxopropyl)amino]-2''-(phenylmethoxy)-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



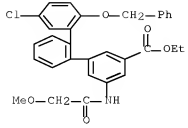
RN 690261-17-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[(1-oxopropyl)amino]-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



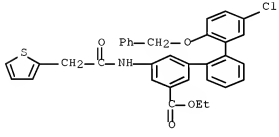
RN 690261-18-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-5-[(1-oxopropyl)amino]-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



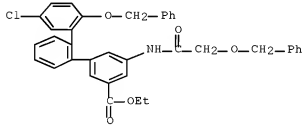
RN 690261-19-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(methoxyacetyl)amino]-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



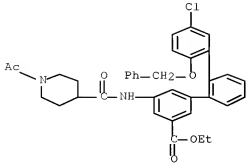
RN 690261-20-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-5-[(2-thienylacetyl)amino]-, ethyl ester (9CI) (CA INDEX NAME)



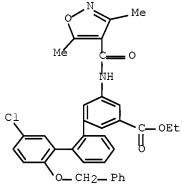
RN 690261-21-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-5-[[(phenylmethoxy)acetyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)



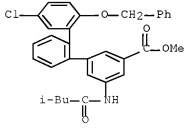
RN 690261-22-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[[(1-acetyl-4-piperidinyl)carbonyl]amino]-5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



RN 690261-23-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[[(3,5-dimethyl-4-isoxazolyl)carbonyl]amino]-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



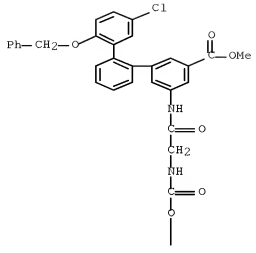
RN 690261-24-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(3-methyl-1-oxobutyl)amino]-2''-(phenylmethoxy)-, methyl ester (9CI) (CA INDEX NAME)



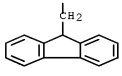
RN 690261-25-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[[[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]acetyl]amino]-2''-(phenylmethoxy)-, methyl ester

(9CI) (CA INDEX NAME)

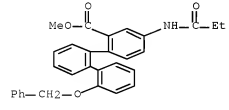
PAGE 1-A



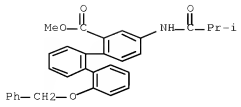
PAGE 2-A



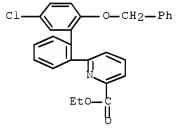
RN 690261-26-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-[(1-oxopropyl)amino]-2''-(phenylmethoxy)-, methyl ester (9CI) (CA INDEX NAME)



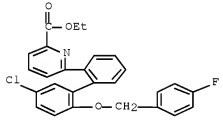
RN 690261-27-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-[(2-methyl-1-oxopropyl)amino]-2''-(phenylmethoxy)-, methyl ester (9CI) (CA INDEX NAME)



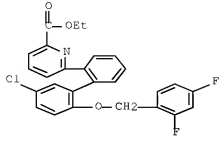
RN 690261-30-4 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



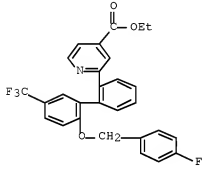
RN 690261-32-6 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(4-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



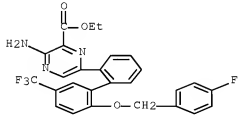
RN 690261-33-7 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2,4-difluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



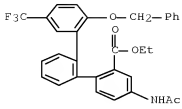
RN 690261-36-0 ZCAPLUS
CN 4-Pyridinecarboxylic acid, 2-[2'-[(4-fluorophenyl)methoxy]-5'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



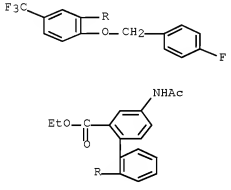
RN 690261-37-1 ZCAPLUS
CN 2-Pyrazinecarboxylic acid, 3-amino-6-[2'-[(4-fluorophenyl)methoxy]-5'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



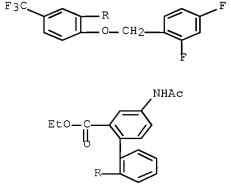
RN 690261-40-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-(phenylmethoxy)-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



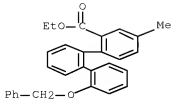
RN 690261-41-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



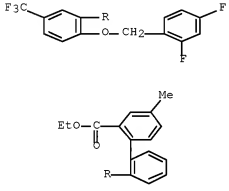
RN 690261-42-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-[(2,4-difluorophenyl)methoxy]-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



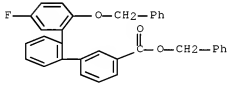
RN 690261-44-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-methyl-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



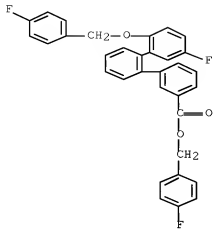
RN 690261-45-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-methyl-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



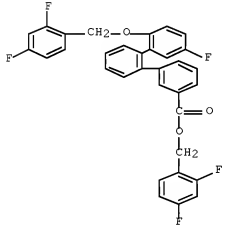
RN 690261-48-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-fluoro-2''-(phenylmethoxy)-, phenylmethyl ester (9CI) (CA INDEX NAME)



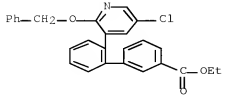
RN 690261-49-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-fluoro-2''-[(4-fluorophenyl)methoxy]-, (4-fluorophenyl)methyl ester (9CI) (CA INDEX NAME)



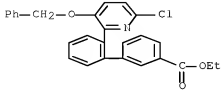
RN 690261-50-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-5''-fluoro-, (2,4-difluorophenyl)methyl ester (9CI) (CA INDEX NAME)



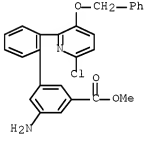
RN 690261-52-0 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 2'-[5-chloro-2-(phenylmethoxy)-3-pyridinyl]-, ethyl ester (CA INDEX NAME)



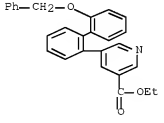
RN 690261-55-3 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 2'-[6-chloro-3-(phenylmethoxy)-2-pyridinyl]-, ethyl ester (CA INDEX NAME)



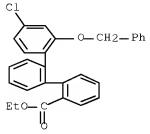
RN 690261-56-4 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 5-amino-2'-[6-chloro-3-(phenylmethoxy)-2-pyridinyl]-, methyl ester (CA INDEX NAME)



RN 690261-57-5 ZCAPLUS
CN 3-Pyridinecarboxylic acid, 5-[2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



RN 690261-61-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)


Cl
O—CH2—Ph
EtO—C
O

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FILE 'REGISTRY' ENTERED AT 10:31:02 ON 12 MAY 2008
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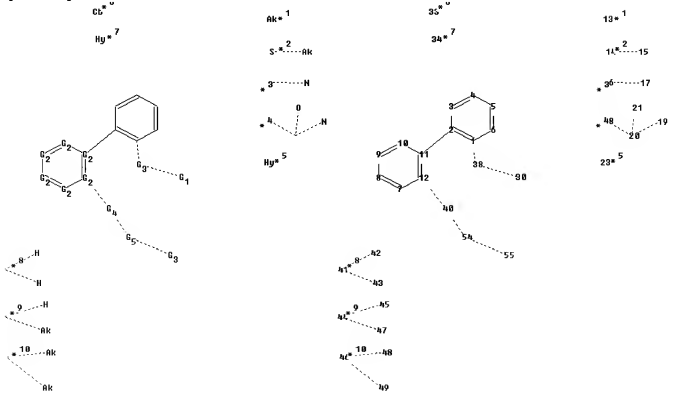

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chain nodes :
13  14  15  16  17  18  19  20  21  23  30  33  34  38  40  41  42  43  44  45  46
47  48  49  54  55
```

```
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12
chain bonds :
1-38  2-11  12-40  14-15  16-17  18-20  19-20  20-21  30-38  40-54  41-42  41-43
44-45  44-47  46-48  46-49  54-55
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8  7-12  8-9  9-10  10-11  11-12
exact/norm bonds :
1-38  2-11  7-8  7-12  8-9  9-10  10-11  11-12  12-40  14-15  16-17  18-20  19-20
20-21  30-38  40-54  41-42  41-43  44-45  44-47  46-48  46-49  54-55
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6


G1:[*1],[*2],[*3],[*4],[*5]

G2:C,N

G3:[*6],[*7]

G4:O,S

G5:[*8],[*9],[*10]

Connectivity :
21:1 E exact RC ring/chain
Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS  18:CLASS
19:CLASS  20:CLASS  21:CLASS
23:Atom  30:CLASS  33:Atom  34:Atom  38:CLASS  40:CLASS  41:CLASS  42:CLASS
43:CLASS  44:CLASS
45:CLASS  46:CLASS  47:CLASS  48:CLASS  49:CLASS  54:CLASS  55:CLASS
Generic attributes :
33:
Saturation             : Unsaturated



Uploading L3.str
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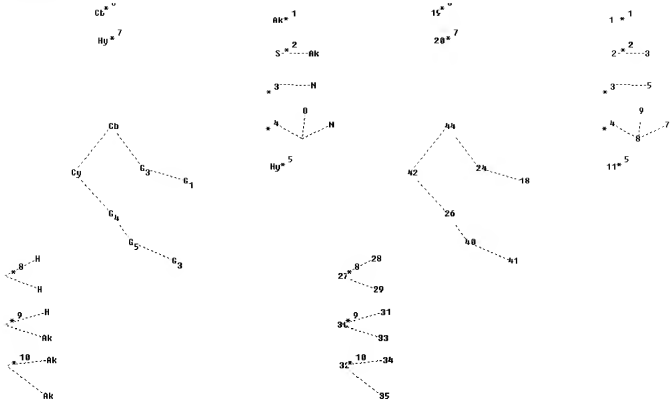


chain nodes :
1 2 3 4 5 6 7 8 9 11 18 19 20 24 26 27 28 29 30 31 32 33 34 35 40 41 42 44
chain bonds :
2-3 4-5 6-8 7-8 8-9 18-24 24-44 26-40 26-42 27-28 27-29 30-31 30-33 32-34 32-35 40-41 42-44
exact/norm bonds :
2-3 4-5 6-8 7-8 8-9 18-24 24-44 26-40 26-42 27-28 27-29 30-31 30-33 32-34 32-35 40-41 42-44

G1:[*1],[*2],[*3],[*4],[*5]

G3:[*6],[*7]

G4:O,S

G5:[*8],[*9],[*10]

Connectivity :
9:1 E exact RC ring/chain 42:4 X maximum RC ring/chain 44:4 X maximum RC ring/chain

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 11:Atom 18:CLASS 19:Atom 20:Atom 24:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 40:CLASS 41:CLASS 42:Atom 44:Atom
Generic attributes :
19:
Saturation : Unsaturated
42:

```
Saturation              : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System     : Monocyclic
44:
Saturation              : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System     : Monocyclic

Element Count :
Node 42: Limited
    C,C5-6
    N,N0-1
    S,S0
    O,O0
    P,P0

Node 44: Limited
    C,C6



Uploading L4.str
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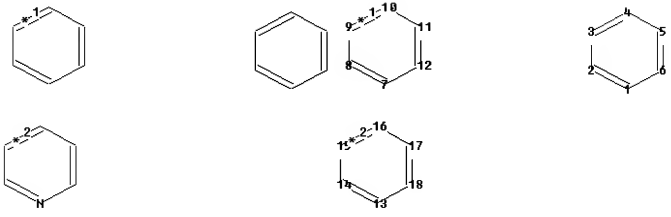
G1 23




```
chain nodes :
23
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8  7-12  8-9  9-10  10-11  11-12  13-14  13-18  14-
15
15-16  16-17  17-18
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8  7-12  8-9  9-10  10-11  11-12  13-14  13-18  14-
15
15-16  16-17  17-18
isolated ring systems :
containing 1 : 7 : 13 :


G1:[*1],[*2]
```

```
Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom  23:CLASS


Uploading L9.str
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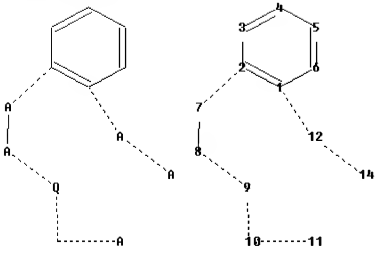


```
chain nodes :
9  10
ring nodes :
1  2  3  4  5  6  7  8  11  12  14
chain bonds :
1-12  2-7  8-9  9-10  10-11
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8  12-14
exact/norm bonds :
1-12  2-7  8-9  9-10  10-11  12-14
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6  7-8
isolated ring systems :
containing 1 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:CLASS  10:CLASS
11:Atom  12:Atom  14:Atom



=> file zcaplus
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FILE COVERS 1907 - 12 May 2008 VOL 148 ISS 20
FILE LAST UPDATED: 11 May 2008 (20080511/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

=> d stat que L12
L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L3 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L4 STR

G1


G1 [@1],[@2]

Structure attributes must be viewed using STN Express query preparation.
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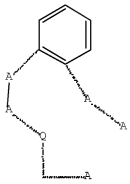
L6 SCR 1946
L7 5110201 SEA FILE=REGISTRY ABB=ON PLU=ON 46.150.18/RID AND NRS>3
L9 STR



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Structure attributes must be viewed using STN Express query preparation.
L11         239 SEA FILE=REGISTRY SUB=L7 SSS FUL (L1 AND L3 AND L4 AND L9) AND
                (L5 AND L6)
L12           9 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  L11


=> file babs
FILE 'BABS' ENTERED AT 10:31:22 ON 12 MAY 2008
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FILE LAST UPDATED: 17 MAR 2008       <20080317/UP>
FILE COVERS 1980 TO DATE.

=> d stat que L48
L48           4 SEA FILE=BABS ABB=ON  PLU=ON  (6644860/BABSAN OR 6702500/BABSAN
                OR 6340976/BABSAN OR 6562995/BABSAN)


=> file beilstein
FILE 'BEILSTEIN' ENTERED AT 10:31:38 ON 12 MAY 2008
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FILE LAST UPDATED ON April 1, 2008

FILE COVERS 1771 TO 2008.
*** FILE CONTAINS 10.322,808  SUBSTANCES ***

>>>PLEASE NOTE: Reaction Data and substance data are stored in
   separate documents and can not be searched together in one query.
   Reaction data for BEILSTEIN compounds may be displayed
   immediately with the display codes PRE (preparations) and REA
   (reactions).  A substance answer set retrieved after the search
   for a chemical name, a compounds with available reaction
   information by combining with PRE/FA, REA/FA or more generally
   with RX/FA. The BEILSTEIN Registry Number (BRN) is the link
   between a BEILSTEIN compound and belonging reactions. For mo
   detailed reaction searches BRNs can be searched as reaction
   partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE  <<<
```

```
**********************************************************************
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.                *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE   *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE          *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.                        *
* FOR PRICE INFORMATION SEE HELP COST                                *
**********************************************************************

>>> Price change as of January 1st, 2008: Connect Time and Structure
    Search fees re-introduced. See NEWS and HELP COST <<<

=> d stat que L47
L1              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L3              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L4              STR


              G1
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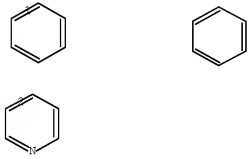


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L9              STR
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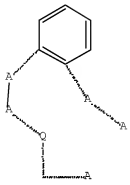

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Structure attributes must be viewed using STN Express query preparation.
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L46            9 SEA FILE=BEILSTEIN ABB=ON  PLU=ON  L45 AND BABSAN/FA
L47            4 SEA FILE=BEILSTEIN ABB=ON  PLU=ON  L45 NOT L46


=> dup rem L12 L48 L47
DUPLICATE IS NOT AVAILABLE IN 'BEILSTEIN'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
FILE 'ZCAPLUS' ENTERED AT 10:31:59 ON 12 MAY 2008
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PROCESSING COMPLETED FOR L12
PROCESSING COMPLETED FOR L48
PROCESSING COMPLETED FOR L47
L50           13 DUP REM L12 L48 L47 (4 DUPLICATES REMOVED)
                 ANSWERS '1-9' FROM FILE ZCAPLUS
                 ANSWERS '10-13' FROM FILE BEILSTEIN

=> d ibib abs hitstr L50 1-9; d ide allref L50 10-13

L50  ANSWER 1 OF 13  ZCAPLUS  COPYRIGHT 2008 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2007:743246  ZCAPLUS  Full-text
DOCUMENT NUMBER:          147:323038
TITLE:                    Synthesis of Tetra-ortho-substituted,
                          Phosphorus-Containing and Carbonyl-Containing Biaryls
                          Utilizing a Diels-Alder Approach
AUTHOR(S):                Ashburn, Bradley O.; Carter, Rich G.; Zakharov, Lev N.
CORPORATE SOURCE:         Department of Chemistry, Oregon State University,
                          Corvallis, OR, 97331, USA
SOURCE:                   Journal of the American Chemical Society (2007),
                          129(29), 9109-9116
                          CODEN: JACSAT; ISSN: 0002-7863
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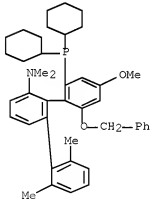
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 147:323038

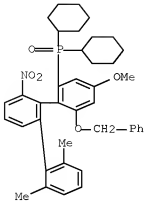
AB The application of the Diels-Alder approach to biaryls (DAB) is described for the synthesis of tetra-ortho-substituted biaryl compds. containing orthogonally functionalized substituents. The syntheses of P-containing, disubstituted alkynes and carbonyl-containing, disubstituted alkynes were accomplished in two to three steps from com. available reagents. Subsequent Diels-Alder cycloaddns. with a range of oxygenated dienes yielded the target biaryls. Further functionalization through Pd-couplings is demonstrated on the P-containing biaryls. Selective manipulation of each of the remaining ortho substituents on the P-containing biaryls is demonstrated. One of these P-containing derivs. was used as a highly active catalyst for Suzuki coupling. For the carbonyl-containing series, a wide range of dienophile substituents were screened including esters, ketones, and amides. The key Diels-Alder cycloaddns. proceeded smoothly with the com. available 1-methoxy-1,3-cyclohexadiene to yield the resultant tetra-ortho-substituted biaryls with excellent regioselectivity. The scope of the cycloaddn. process was also explored on the carbonyl-containing dienophiles with cyclic dienes. Acyclic dienes were also screened; however, they did not prove effective in the Diels-Alder process with the carbonyl-containing acetylenes. The ability to isolate enantiomerically pure biaryl atropisomers using a benzyl oxazolidinone is disclosed. Finally, the subsequent conversion to an axially chiral anilino alc. is also reported.

IT 916978-88-6P 916978-92-2P 947612-43-3P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(crystal structure; preparation and Diels-Alder reaction of P-containing and
carbonyl-containing alkynes with oxygenated dienes and cyclic dienes to give tetra-ortho-substituted biaryl compds.)

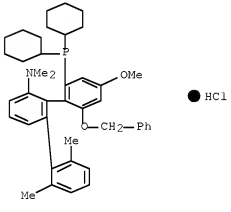
RN 916978-88-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3'-amine, 2''-(dicyclohexylphosphino)-4''-methoxy-N,N,2,6-tetramethyl-6''-(phenylmethoxy)- (CA INDEX NAME)



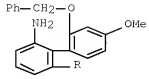

RN 916978-92-2 ZCAPLUS
CN Phosphine oxide, dicyclohexyl[4-methoxy-2'',6''-dimethyl-6'-nitro-6-(phenylmethoxy)[1,1':2',1''-terphenyl]-2-yl]- (CA INDEX NAME)




RN 947612-43-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3'-amine, 2''-(dicyclohexylphosphino)-4''-methoxy-N,N,2,6-tetramethyl-6''-(phenylmethoxy)-, hydrochloride (1:1) (CA INDEX NAME)

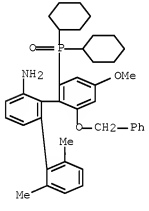



IT 947612-34-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and Diels-Alder reaction of P-containing and carbonyl-containing
alkynes with oxygenated dienes and cyclic dienes to give
tetra-ortho-substituted biaryl compds.)
RN 947612-34-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3'-amine, 4''-methoxy-2,6-dimethyl-2''-(phenylmethoxy)- (CA INDEX NAME)

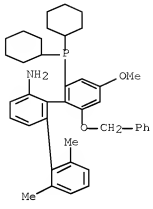




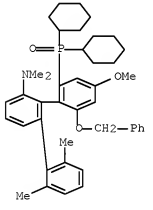
IT 916978-86-4P 916978-87-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and Diels-Alder reaction of P-containing and carbonyl-containing
alkynes with oxygenated dienes and cyclic dienes to give
tetra-ortho-substituted biaryl compds.)
RN 916978-86-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3'-amine, 2''-(dicyclohexylphosphinyl)-4''-methoxy-2,6-dimethyl-6''-(phenylmethoxy)- (CA INDEX NAME)



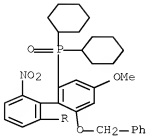

RN 916978-87-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3'-amine, 2''-(dicyclohexylphosphino)-4''-methoxy-2,6-dimethyl-6''-(phenylmethoxy)- (CA INDEX NAME)




IT 947612-35-3P 947612-42-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and Diels-Alder reaction of P-containing and carbonyl-containing
alkynes with oxygenated dienes and cyclic dienes to give
tetra-ortho-substituted biaryl compds.)
RN 947612-35-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3'-amine, 2''-(dicyclohexylphosphinyl)-4''-methoxy-N,N,2,6-tetramethyl-6''-(phenylmethoxy)- (CA INDEX NAME)




RN 947612-42-2 ZCAPLUS
CN Phosphine oxide, dicyclohexyl[4-methoxy-2''-methyl-6'-nitro-6-(phenylmethoxy)[1,1':2',1''-terphenyl]-2-yl]- (CA INDEX NAME)





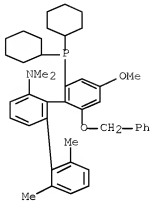
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 2 OF 13 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2006:1146810 ZCAPLUS Full-text
DOCUMENT NUMBER: 146:62815
TITLE: Diels-Alder approach to polysubstituted biaryls: rapid entry to tri- and tetra-ortho-substituted phosphorus-containing biaryls
AUTHOR(S): Ashburn, Bradley O.; Carter, Rich G.
CORPORATE SOURCE: Department of Chemistry, Oregon State University (OSU), Corvallis, OR, 97331, USA
SOURCE: Angewandte Chemie, International Edition (2006), 45(40), 6737-6741
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:62815

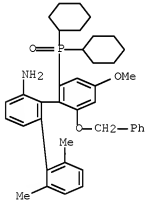
AB A Diels-Alder-based approach to the synthesis of highly functionalized biaryls from readily available precursors is disclosed. The utility of these biaryl templates in palladium-mediated couplings is explored along with subsequent redns. of the nitro and phosphine oxide moieties. Thus, Diels-Alder cycloaddn. of Me3SiOC(OMe):CHCH(OMe):CH2 with 2-Br-6-O2NC6H3C.tplbond.CP(O)R2 (R = cyclohexyl; preparation given) in PhMe in the presence of Et3N gave 2-Br-6-O2NC6H3C6H2-2-OH-4-OMe-6-P(O)R2 (R = same). Finally, initial application of a synthesized biaryl as a highly active ligand in palladium-mediated coupling is carried out.

IT 916978-88-6P
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation of tri- and tetra-ortho-substituted phosphorus-containing biaryls via Diels-Alder approach to polysubstituted biaryls)

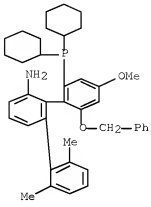
RN 916978-88-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3'-amine, 2''-(dicyclohexylphosphino)-4''-methoxy-N,N,2,6-tetramethyl-6''-(phenylmethoxy)- (CA INDEX NAME)



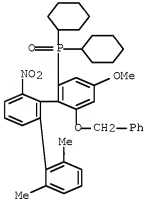

IT 916978-86-4P 916978-87-5P 916978-92-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of tri- and tetra-ortho-substituted phosphorus-containing biaryls
via Diels-Alder approach to polysubstituted biaryls)
RN 916978-86-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3'-amine, 2''-(dicyclohexylphosphinyl)-4''-methoxy-2,6-dimethyl-6''-(phenylmethoxy)- (CA INDEX NAME)




RN 916978-87-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3'-amine, 2''-(dicyclohexylphosphino)-4''-methoxy-2,6-dimethyl-6''-(phenylmethoxy)- (CA INDEX NAME)



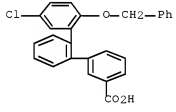

RN 916978-92-2 ZCAPLUS
CN Phosphine oxide, dicyclohexyl[4-methoxy-2'',6''-dimethyl-6'-nitro-6-(phenylmethoxy)[1,1':2',1''-terphenyl]-2-yl]- (CA INDEX NAME)




REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

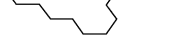
L50 ANSWER 3 OF 13 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2006:315138 ZCAPLUS Full-text
DOCUMENT NUMBER: 144:480399
TITLE: Discovery of novel biaryl heterocyclic EP1 receptor antagonists
AUTHOR(S): Hall, Adrian; Bit, Rino A.; Brown, Susan H.; Chaignot, Helene M.; Chessell, Iain P.; Coleman, Tanya; Giblin, Gerard M. P.; Hurst, David N.; Kilford, Ian R.; Lewell, Xiao Q.; Michel, Anton D.; Mohamed, Shiyam; Naylor, Alan; Novelli, Riccardo; Skinner, Lee; Spalding, David J.; Tang, Sac P.; Wilson, Richard J.
CORPORATE SOURCE: Neurology and Gastrointestinal Centre of Excellence for Drug Discovery, GlaxoSmithKline, Essex, CM19 5AW, UK
SOURCE: Bioorganic & Medicinal Chemistry Letters (2006), 16(10), 2666-2671

CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:480399
AB We describe the generation of novel EP1 receptor antagonists by investigation of thiophene isosteres. In addition, we disclose preliminary in vitro and in vivo DMPK for selected compds.
IT 690259-48-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Discovery of novel biaryl heterocyclic EP1 receptor antagonists)
RN 690259-48-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)




REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 4 OF 13 ZCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2002:325630 ZCAPLUS Full-text
DOCUMENT NUMBER: 137:125038
TITLE: Total synthesis of the turrianes and evaluation of their DNA-cleaving properties
AUTHOR(S): Furstner, Alois; Stelzer, Frank; Rumbo, Antonio; Krause, Helga
CORPORATE SOURCE: Max-Planck-Institut fur Kohlenforschung, Mulheim, 45470, Germany
SOURCE: Chemistry--A European Journal (2002), 8(8), 1856-1871
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:125038
GI




I

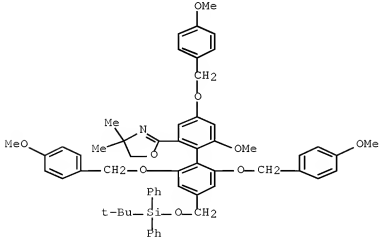
AB The first total synthesis of three naturally occurring cyclophane derivs., e.g I, belonging to the turriane family of natural products is described. Their sterically hindered biaryl entity is formed by reaction of the Grignard reagent derived from an aryl bromide with an oxazoline derivative, and the macrocyclic tether of the targets is efficiently forged by ring closing metathesis. While conventional RCM catalyzed by the ruthenium-carbene complexes invariably leads to the formation of mixts. of both stereoisomers with the undesirable (E)-alkene prevailing, ring closing alkyne metathesis (RCAM) followed by Lindlar reduction of the resulting cycloalkynes opens a convenient and stereoselective entry into this class of compds. RCAM can either be accomplished by using the tungsten alkylidyne complex [(tBuO)3W.tplbond.CCMe3] or by means of a catalyst formed in situ from [Mo(CO)6] and para-trifluoromethylphenol. The latter method is significantly accelerated when carried out under microwave heating. Furthermore, the judicious choice of the protecting groups for the phenolic hydroxy functions turned out to be crucial. PMB-ethers were found to be compatible with the diverse reaction conditions en route to the targets; their cleavage, however, had to be carried out under carefully optimized conditions to minimize competing O-C PMB migration. The prepared turrianes are shown to be potent DNA cleaving agents under oxidative conditions when administered in the presence of copper ions.

IT 444119-59-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(total synthesis of the turrianes via a key ring closing alkyne metathesis cyclization and evaluation of their DNA-cleaving properties)

RN 444119-59-9 ZCAPLUS

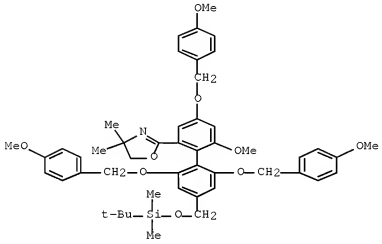
CN Oxazole, 2-[4'-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]-6-methoxy-2',4,6'-tris[(4-methoxyphenyl)methoxy][1,1'-biphenyl]-2-yl]-4,5-dihydro-4,4-dimethyl- (CA INDEX NAME)



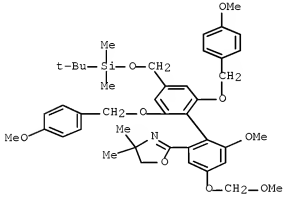

IT 444119-77-1P 444119-78-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of the turrianes via a key ring closing alkyne

metathesis cyclization and evaluation of their DNA-cleaving properties)
RN 444119-77-1 ZCAPLUS
CN Oxazole, 2-[4'-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-6-methoxy-2',4,6'-tris[(4-methoxyphenyl)methoxy][1,1'-biphenyl]-2-yl]-4,5-dihydro-4,4-dimethyl- (CA INDEX NAME)



RN 444119-78-2 ZCAPLUS
CN Oxazole, 2-[4'-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-6-methoxy-4-(methoxymethoxy)-2',6'-bis[(4-methoxyphenyl)methoxy][1,1'-biphenyl]-2-yl]-4,5-dihydro-4,4-dimethyl- (CA INDEX NAME)

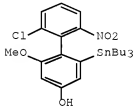


REFERENCE COUNT: 126 THERE ARE 126 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 5 OF 13 ZCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:234425 ZCAPLUS Full-text
DOCUMENT NUMBER: 148:426490
TITLE: Synthesis of Programmable Tetra-ortho-Substituted

Biaryl Compounds Using Diels-Alder Cycloadditions/Cycloreversions of Disubstituted Alkynyl Stannanes

AUTHOR(S): Perkins, Johanna R.; Carter, Rich G.
CORPORATE SOURCE: Department of Chemistry, Oregon State University, Corvallis, OR, 97331, USA
SOURCE: Journal of the American Chemical Society (2008), 130(11), 3290-3291
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

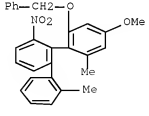



I

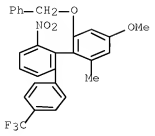
AB Orthogonally functionalized, programmable biaryl templates, e.g., I, have been synthesized utilizing aryl acetylenic stannanes and oxygenated dienes in a cycloaddn./cycloreversion strategy. Sequential functionalization of each of the four ortho positions has been demonstrated. Subsequent resolution of a representative anilino phenol has been accomplished. Addnl., a highly active anhydrous, boroxin-based Suzuki coupling protocol has been developed for conversion of unreactive aryl chlorides.

IT 1017280-76-0P 1017280-77-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of tetra-ortho-substituted biaryls via Diels-Alder cycloaddn. and cycloreversion of arylacetylenic stannanes with oxygenated dienes followed by cross-coupling)

RN 1017280-76-0 ZCAPLUS
CN INDEX NAME NOT YET ASSIGNED

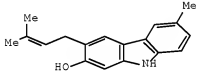



RN 1017280-77-1 ZCAPLUS
CN INDEX NAME NOT YET ASSIGNED




REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 6 OF 13 ZCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:767247 ZCAPLUS Full-text
DOCUMENT NUMBER: 147:522429
TITLE: Diels-Alder Approach for the Construction of Halogenated, o-Nitro Biaryl Templates and Application to the Total Synthesis of the Anti-HIV Agent Siamenol
AUTHOR(S): Naffziger, Michael R.; Ashburn, Bradley O.; Perkins, Johanna R.; Carter, Rich G.
CORPORATE SOURCE: Department of Chemistry, Oregon State University, Corvallis, OR, 97331, USA
SOURCE: Journal of Organic Chemistry (2007), 72(26), 9857-9865 CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 147:522429
GI

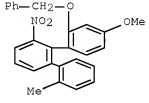


I

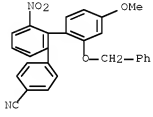
AB A rapid Diels-Alder approach to halogenated biaryl templates is described. These biaryl templates are available in two steps from the corresponding aromatic aldehydes. The scope of subsequent Suzuki couplings on the biaryl chlorides is explored. Good tolerance for both electron-donating and electron-withdrawing groups in the coupling process can be achieved. Further functionalization of the biaryl templates is described. Hydrogenation of the nitro moiety with concomitant removal of the benzyl ether yields the o-anilino, o-phenolic polyaryls. Selective reduction of the nitro group can be accomplished. Alternatively, the benzyl ether can be selectively removed under Lewis acidic conditions. The utilization of the Diels-Alder adducts for the synthesis of a series of chlorinated carbazoles via the Cadogan cyclization is also demonstrated. Finally, application of this technol. to the total synthesis of siamenol (I), an anti-HIV agent, is reported.
IT 947513-91-9P 947513-94-2P 947513-96-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, functionalization and application to the synthesis of carbazoles and siamenol of biaryl templates via Diels-Alder reaction)

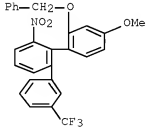
RN 947513-91-9 ZCAPLUS
CN 1,1':2',1''-Terphenyl, 4''-methoxy-2-methyl-3'-nitro-2''-(phenylmethoxy)- (CA INDEX NAME)




RN 947513-94-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-4-carbonitrile, 4''-methoxy-3'-nitro-2''-(phenylmethoxy)- (CA INDEX NAME)




RN 947513-96-4 ZCAPLUS
CN 1,1':2',1''-Terphenyl, 4''-methoxy-3'-nitro-2''-(phenylmethoxy)-3-(trifluoromethyl)- (CA INDEX NAME)



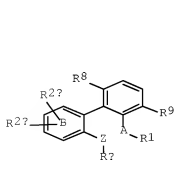

REFERENCE COUNT: 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 7 OF 13 ZCAPLUS COPYRIGHT 2008 ACS on STN

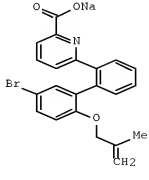
ACCESSION NUMBER: 2005:1220712 ZCAPLUS Full-text
DOCUMENT NUMBER: 143:477851
TITLE: Preparation of sodium 6-(2-biphenyl)-2-pyridinecarboxylates for treating conditions mediated by the action of PGE2 at the EP1 receptor
INVENTOR(S): Bit, Rino Antonio; Giblin, Gerard Martin Paul; Hall, Adrian; Hayhow, Thomas; Hurst, David Nigel; Kilford, Ian Reginald; Miller, Neil Derek; Naylor, Alan; Novelli, Riccardo; Scoccitti, Tiziana
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005108369 | A1 | 20051117 | WO 2005-EP4726 | 20050429 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1742916 | A1 | 20070117 | EP 2005-738052 | 20050429 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, LV | | | | |
| JP 2007536309 | T | 20071213 | JP 2007-511989 | 20050429 |
| US 20070225340 | A1 | 20070927 | US 2006-568573 | 20061102 |
| PRIORITY APPLN. INFO.: | | | GB 2004-10121 A | 20040506 |
| | | | WO 2005-EP4726 W | 20050429 |

OTHER SOURCE(S): MARPAT 143:477851
GI




I



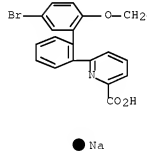

II

AB The title compds. I [A = (un)substituted aryl, 5-6 membered heterocyclyl, bicyclic heterocyclyl; B = Ph, pyridyl; Z = O, S, SO, SO2; R1 = CO2H, CN, COalkyl, etc.; R2a, R2b = H, halo, CN, etc.; Rx = (un)substituted alkyl [wherein 1 or 2 of the non-terminal carbon atoms are optionally replaced by NR4, O or SOn (wherein n = 0-2)], (un)substituted alkenyl, (un)substituted alkynyl, etc.; R8, R9 = H, halo, CF3, alkoxy, alkyl], useful in the treatment of conditions mediated by the action of PGE2 at the EP1 receptor (which is associated with smooth muscle contraction, pain (in particular inflammatory, neuropathic and visceral), inflammation, allergic activities, renal regulation and gastric or enteric mucus secretion), were prepared Thus, treating suspension of Et 6-{5'-bromo-2'-[(2-methyl-2-propen-1-yl)oxy]-2-biphenylyl}-2-pyridinecarboxylate in EtOH with 1M NaOH afforded II. The exemplified compds. I showed an antagonist pIC50 of 6.0 or greater at EP2 receptors. The pharmaceutical composition comprising the compound I is disclosed.

IT 869499-15-0P 869499-16-1P 869499-17-2P
869499-18-3P 869499-19-4P 869499-20-7P
869499-21-8P 869499-22-9P 869499-23-0P
869499-24-1P 869499-25-2P 869499-26-3P
869499-36-5P 869499-37-6P 869499-39-8P
869499-40-1P 869499-41-2P 869499-42-3P
869499-45-6P 869499-48-9P 869499-49-0P
869499-50-3P 869499-51-4P 869499-52-5P
869499-53-6P 869499-54-7P 869499-73-0P
869499-74-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of sodium 6-(2-biphenyl)-2-pyridinecarboxylates for treating conditions mediated by the action of PGE2 at the EP1 receptor)

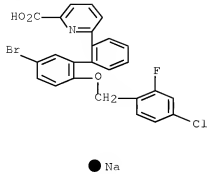
RN 869499-15-0 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)

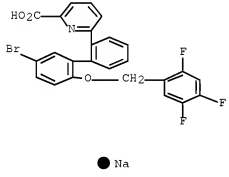



RN 869499-16-1 ZCAPLUS

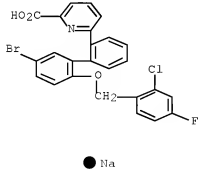
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(4-chloro-2-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



RN 869499-17-2 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(2,4,5-trifluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)

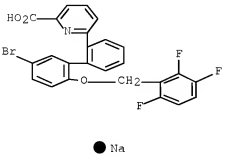


RN 869499-18-3 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(2-chloro-4-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



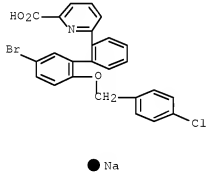
RN 869499-19-4 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(2,3,6-trifluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



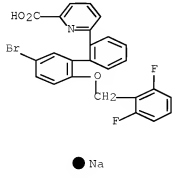
RN 869499-20-7 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(4-chlorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)

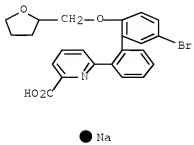


RN 869499-21-8 ZCAPLUS

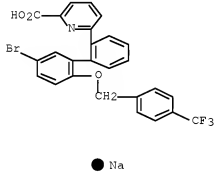
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(2,6-difluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



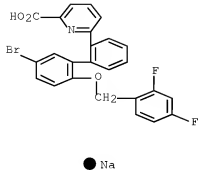
RN 869499-22-9 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(tetrahydro-2-furanyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



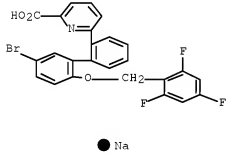
RN 869499-23-0 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[[4-(trifluoromethyl)phenyl]methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



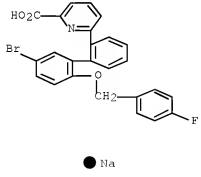
RN 869499-24-1 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(2,4-difluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



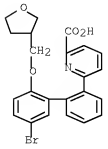
RN 869499-25-2 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(2,4,6-trifluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



RN 869499-26-3 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(4-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)

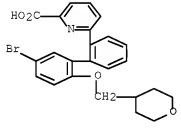


RN 869499-36-5 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(tetrahydro-3-furanyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



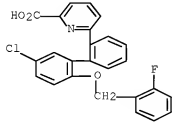
Na

RN 869499-37-6 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-bromo-2'-[(tetrahydro-2H-pyran-4-yl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



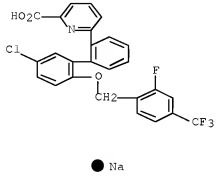
Na

RN 869499-39-8 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)

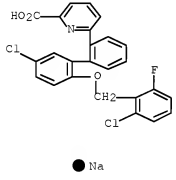


Na

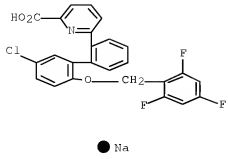
RN 869499-40-1 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[[2-fluoro-4-(trifluoromethyl)phenyl]methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



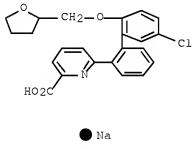
RN 869499-41-2 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2-chloro-6-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



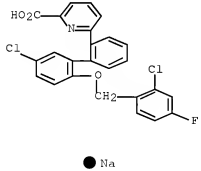
RN 869499-42-3 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2,4,6-trifluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



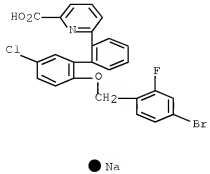
RN 869499-45-6 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(tetrahydro-2-furanyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



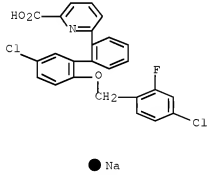
RN 869499-48-9 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2-chloro-4-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



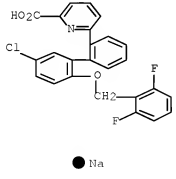
RN 869499-49-0 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[2'-[(4-bromo-2-fluorophenyl)methoxy]-5'-chloro[1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



RN 869499-50-3 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(4-chloro-2-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)

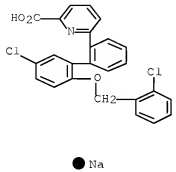


RN 869499-51-4 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2,6-difluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



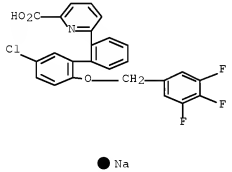
RN 869499-52-5 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2-chlorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



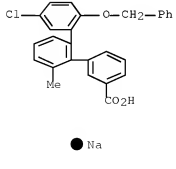
RN 869499-53-6 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(3,4,5-trifluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)

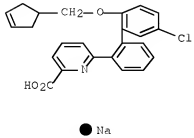


RN 869499-54-7 ZCAPLUS

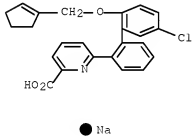
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-6'-methyl-2''-(phenylmethoxy)-, sodium salt (9CI) (CA INDEX NAME)



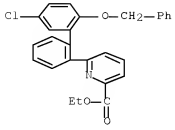
RN 869499-73-0 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-(3-cyclopenten-1-ylmethoxy)[1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



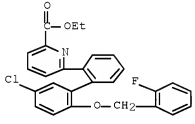
RN 869499-74-1 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-(1-cyclopenten-1-ylmethoxy)[1,1'-biphenyl]-2-yl]-, sodium salt (1:1) (CA INDEX NAME)



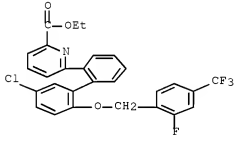
IT 690261-30-4P 869499-91-2P 869499-92-3P
869499-93-4P 869499-94-5P 869499-95-6P
869499-96-7P 869499-97-8P 869499-98-9P
869499-99-0P 869500-00-5P 869500-04-9P
869500-09-4P 869500-16-3P 869500-17-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of sodium 6-(2-biphenyl)-2-pyridinecarboxylates for treating conditions mediated by the action of PGE2 at the EP1 receptor)
RN 690261-30-4 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



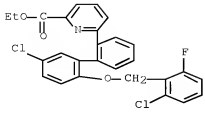
RN 869499-91-2 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



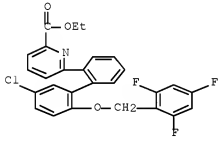
RN 869499-92-3 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[[2-fluoro-4-(trifluoromethyl)phenyl]methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



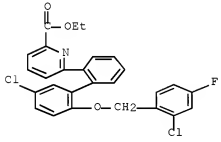
RN 869499-93-4 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2-chloro-6-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



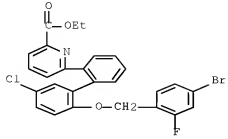
RN 869499-94-5 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2,4,6-trifluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



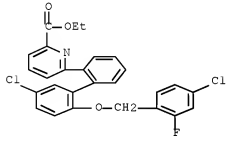
RN 869499-95-6 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2-chloro-4-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



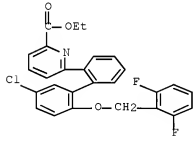
RN 869499-96-7 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[2'-[(4-bromo-2-fluorophenyl)methoxy]-5'-chloro[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



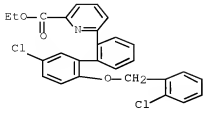
RN 869499-97-8 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(4-chloro-2-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



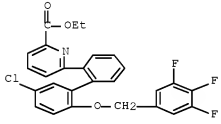
RN 869499-98-9 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2,6-difluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



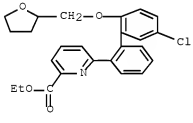
RN 869499-99-0 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2-chlorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



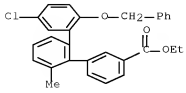
RN 869500-00-5 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(3,4,5-trifluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



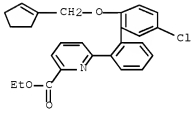
RN 869500-04-9 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(tetrahydro-2-furanyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



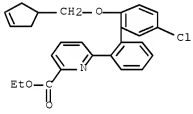
RN 869500-09-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-3'-methyl-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



RN 869500-16-3 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-(1-cyclopenten-1-ylmethoxy)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



RN 869500-17-4 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-(3-cyclopenten-1-ylmethoxy)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

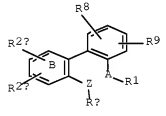
L50 ANSWER 8 OF 13 ZCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:390204 ZCAPLUS Full-text
DOCUMENT NUMBER: 140:406635
TITLE: Preparation of benzoic acids and related compounds as EP1 receptor antagonists for the treatment of prostaglandin mediated diseases.
INVENTOR(S): Bit, Rino Antonio; Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel; Kilford, Ian Reginald; Miller, Neil Derek; Scoccitti, Tiziana
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 96 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004039753 | A2 | 20040513 | WO 2003-EP12181 | 20031030 |
| WO 2004039753 | A3 | 20040715 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003287979 | A1 | 20040525 | AU 2003-287979 | 20031030 |
| EP 1556330 | A2 | 20050727 | EP 2003-779828 | 20031030 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| JP 2006504767 | T | 20060209 | JP 2004-547644 | 20031030 |
| US 20060235057 | A1 | 20061019 | US 2005-533036 | 20050428 |

PRIORITY APPLN. INFO.: GB 2002-25548 A 20021101
WO 2003-EP12181 W 20031030

OTHER SOURCE(S): MARPAT 140:406635
GI




I

AB Title compds. I [A = (un)substituted aryl, 5 or 6-membered heterocyclyl ring, bicyclic heterocyclyl; B = Ph, pyridyl; Z = O, S, SO, etc.; R1 = CO2R4, CN, CONR5R6, etc.; R2a, R2b = H, halogen, (un)substituted alkyl, etc.; Rx = (un)substituted alkyl, CQaQb-heterocyclyl, CQaQb-bicyclic heterocyclyl, etc.; R4, R5 = H, (un)substituted alkyl; R6 = H, (un)substituted alkyl, heteroaryl, etc.; R8, R9 = H, Cl, F, etc.; Qa, Qb = H, CH3] and their pharmaceutically acceptable derivs. were prepared For example, the Suzuki coupling of Et 2'-bromobiphenyl-3-carboxylate and 2-benzyloxy-5-chlorophenylboronic acid, e.g., prepared from 3-ethoxycarbonylphenylboronic acid, followed by hydrolysis afforded compound I [A-R1 = 3-carboxyphenyl; Z = O; R2a = H, R2b = 5-Cl; R8, R9 = H] in 39% overall yield. In human prostanoid EP1 receptor binding assays, 90-examples of compds. I exhibited pIC50 values ranging from 6.0->9.0

at the EP1 receptor and pIC50 values of <6.0 at the EP3 receptor. Of note, no toxicol. effects are indicated/expected (sic) when the compds. I are administered at the assay concentration of 3 nM. Compds. I are claimed useful for the treatment of prostaglandin mediated diseases, e.g., inflammation, pain, etc.

IT 690259-48-4P 690259-49-5P 690259-50-8P
690259-51-9P 690259-52-0P 690259-53-1P
690259-54-2P 690259-55-3P 690259-56-4P
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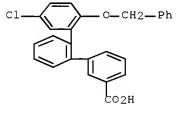
690260-37-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzoic acids and related compds. as EP1 receptor antagonists for the treatment of prostaglandin mediated diseases.)

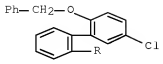
RN 690259-48-4 ZCAPLUS

CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)

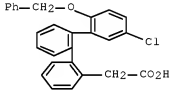



RN 690259-49-5 ZCAPLUS

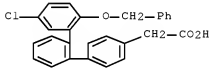
CN [1,1':2',1''-Terphenyl]-3-acetic acid, 5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



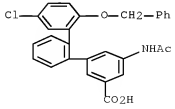
RN 690259-50-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-acetic acid, 5''-chloro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



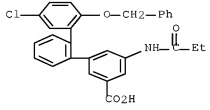
RN 690259-51-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-4-acetic acid, 5''-chloro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



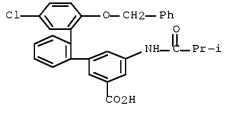
RN 690259-52-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(acetylamino)-5''-chloro-2''-
(phenylmethoxy)- (9CI) (CA INDEX NAME)



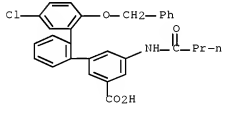
RN 690259-53-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(1-oxopropyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



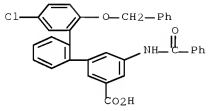
RN 690259-54-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(2-methyl-1-oxopropyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



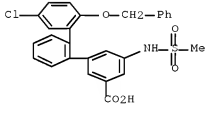
RN 690259-55-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(1-oxobutyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



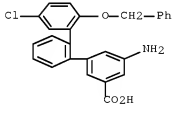
RN 690259-56-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(benzoylamino)-5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



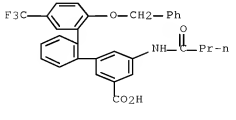
RN 690259-57-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(methylsulfonyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



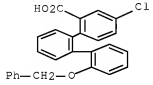
RN 690259-58-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-amino-5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



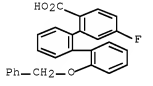
RN 690259-59-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[(1-oxobutyl)amino]-2''-(phenylmethoxy)-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



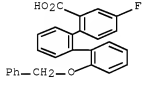
RN 690259-60-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-chloro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



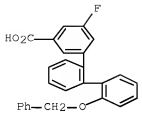

RN 690259-61-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5-fluoro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



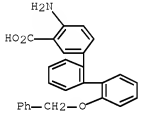

RN 690259-62-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-fluoro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



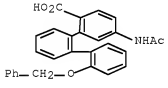

RN 690259-63-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-fluoro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



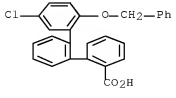

RN 690259-64-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 4-amino-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



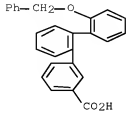

RN 690259-65-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5-(acetylamino)-2''-
(phenylmethoxy)- (9CI) (CA INDEX NAME)



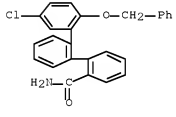

RN 690259-66-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



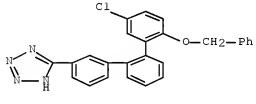
RN 690259-67-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



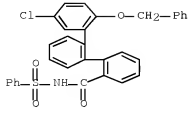
RN 690259-68-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxamide, 5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



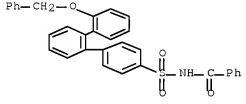
RN 690259-69-9 ZCAPLUS
CN 1H-Tetrazole, 5-[5''-chloro-2''-(phenylmethoxy)[1,1':2',1''-terphenyl]-3-yl]- (9CI) (CA INDEX NAME)



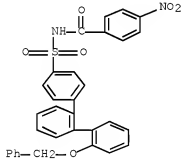
RN 690259-70-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxamide, 5''-chloro-2''-(phenylmethoxy)-N-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



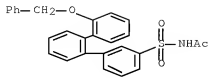
RN 690259-71-3 ZCAPLUS
CN Benzamide, N-[[2''-(phenylmethoxy)[1,1':2',1''-terphenyl]-4-yl]sulfonyl]-
(9CI) (CA INDEX NAME)



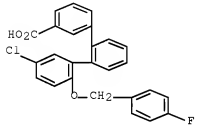
RN 690259-72-4 ZCAPLUS
CN Benzamide, 4-nitro-N-[[2''-(phenylmethoxy)[1,1':2',1''-terphenyl]-4-
yl]sulfonyl]- (9CI) (CA INDEX NAME)



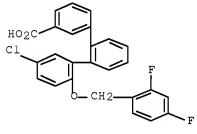
RN 690259-73-5 ZCAPLUS
CN Acetamide, N-[[2''-(phenylmethoxy)[1,1':2',1''-terphenyl]-3-yl]sulfonyl]-
(9CI) (CA INDEX NAME)



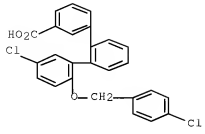

RN 690259-75-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-fluorophenyl)methoxy]- (9CI) (CA INDEX NAME)



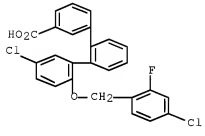

RN 690259-76-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(2,4-difluorophenyl)methoxy]- (9CI) (CA INDEX NAME)



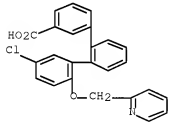

RN 690259-77-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-chlorophenyl)methoxy]- (9CI) (CA INDEX NAME)



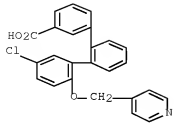

RN 690259-78-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-chloro-2-fluorophenyl)methoxy]- (9CI) (CA INDEX NAME)



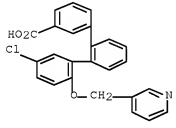

RN 690259-80-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(2-pyridinylmethoxy)- (9CI) (CA INDEX NAME)



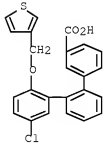

RN 690259-81-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(4-pyridinylmethoxy)- (9CI) (CA INDEX NAME)



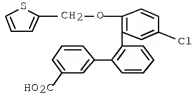
RN 690259-82-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(3-pyridinylmethoxy)- (9CI) (CA INDEX NAME)



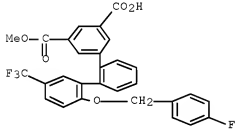
RN 690259-84-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(3-thienylmethoxy)- (9CI) (CA INDEX NAME)



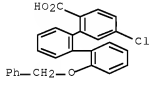
RN 690259-85-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(2-thienylmethoxy)- (9CI) (CA INDEX NAME)



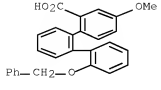
RN 690259-91-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3,5-dicarboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)-, monomethyl ester (9CI) (CA INDEX NAME)



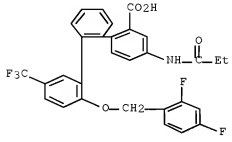
RN 690259-92-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



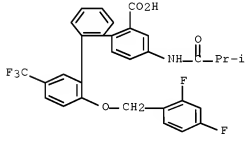
RN 690259-93-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-methoxy-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



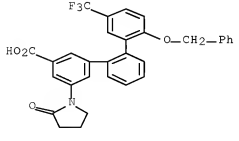
RN 690259-94-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-[(1-oxopropyl)amino]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



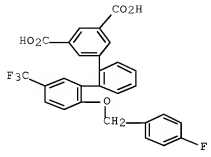
RN 690259-95-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-[(2-methyl-1-oxopropyl)amino]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



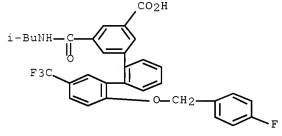
RN 690259-96-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(2-oxo-1-pyrrolidinyl)-2''-(phenylmethoxy)-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



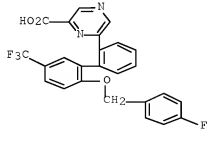
RN 690259-97-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3,5-dicarboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 690259-98-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[[(2-methylpropyl)amino]carbonyl]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)

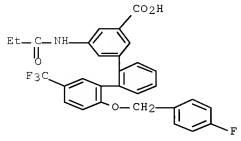


RN 690259-99-5 ZCAPLUS
CN 2-Pyrazinecarboxylic acid, 6-[2'-[(4-fluorophenyl)methoxy]-5'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)

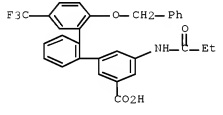


RN 690260-00-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-

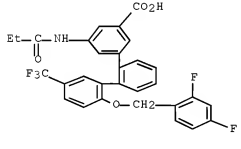
[(1-oxopropyl)amino]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



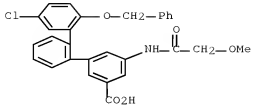
RN 690260-01-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[(1-oxopropyl)amino]-2''-(phenylmethoxy)-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



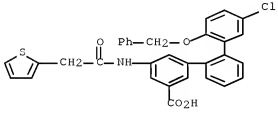
RN 690260-02-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(2,4-fluorophenyl)methoxy]-5-[(1-oxopropyl)amino]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



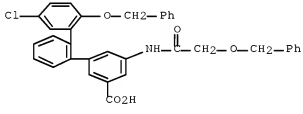
RN 690260-03-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(methoxyacetyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



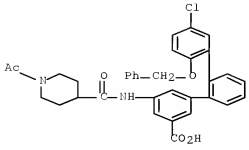
RN 690260-04-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-5-[(2-thienylacetyl)amino]- (9CI) (CA INDEX NAME)



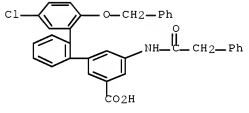
RN 690260-05-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-5-[[(phenylmethoxy)acetyl]amino]- (9CI) (CA INDEX NAME)



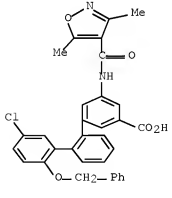
RN 690260-06-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[[(1-acetyl-4-piperidinyl)carbonyl]amino]-5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



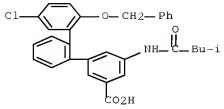
RN 690260-07-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5'''-chloro-5-[(phenylacetyl)amino]-2'''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



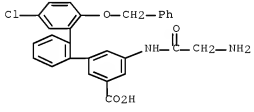
RN 690260-08-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5'''-chloro-5-[[(3,5-dimethyl-4-isoxazolyl)carbonyl]amino]-2'''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



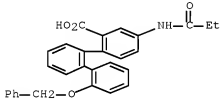
RN 690260-09-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(3-methyl-1-oxobutyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



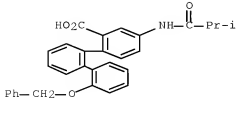
RN 690260-10-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[(aminoacetyl)amino]-5''-chloro-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



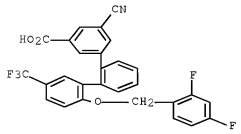
RN 690260-11-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-[(1-oxopropyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



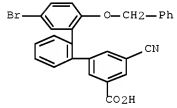
RN 690260-12-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-[(2-methyl-1-oxopropyl)amino]-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



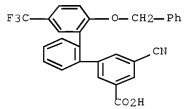
RN 690260-13-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-cyano-2''-[(2,4-difluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



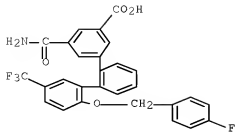
RN 690260-14-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-bromo-5-cyano-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



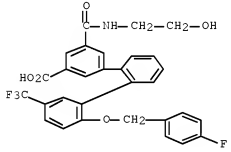
RN 690260-15-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-cyano-2''-(phenylmethoxy)-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



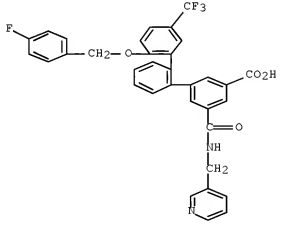
RN 690260-16-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(aminocarbonyl)-2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 690260-17-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[[(2-hydroxyethyl)amino]carbonyl]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)

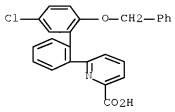


RN 690260-18-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[[(3-pyridinylmethyl)amino]carbonyl]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



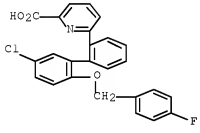
RN 690260-19-6 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)



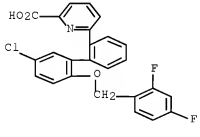
RN 690260-20-9 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(4-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]- (CA INDEX NAME)



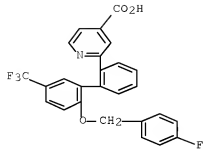
RN 690260-21-0 ZCAPLUS

CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2,4-difluorophenyl)methoxy][1,1'-biphenyl]-2-yl]- (CA INDEX NAME)

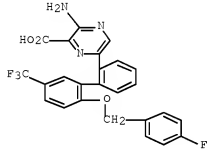


RN 690260-22-1 ZCAPLUS

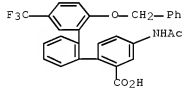
CN 4-Pyridinecarboxylic acid, 2-[2'-[(4-fluorophenyl)methoxy]-5'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)



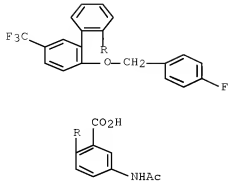
RN 690260-23-2 ZCAPLUS
CN 2-Pyrazinecarboxylic acid, 3-amino-6-[2'-[(4-fluorophenyl)methoxy]-5'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)



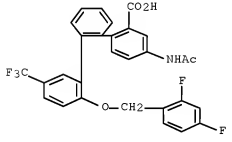
RN 690260-24-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-(phenylmethoxy)-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



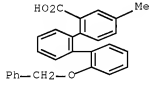
RN 690260-25-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



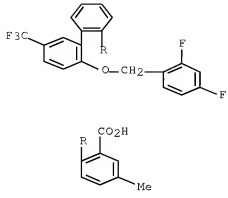
RN 690260-26-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-[(2,4-difluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



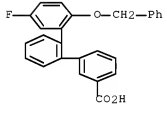
RN 690260-27-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-methyl-2''-(phenylmethoxy)- (9CI) (CA INDEX NAME)



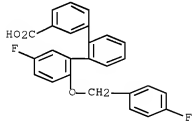
RN 690260-28-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-methyl-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



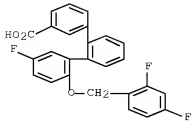
RN 690260-29-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-fluoro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



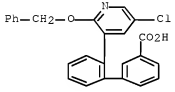
RN 690260-30-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-fluoro-2''-[(4-
fluorophenyl)methoxy]- (9CI) (CA INDEX NAME)



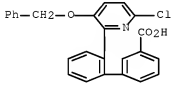
RN 690260-31-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(2,4-
difluorophenyl)methoxy]-5''-fluoro- (9CI) (CA INDEX NAME)



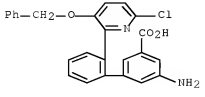
RN 690260-32-3 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 2'-[5-chloro-2-(phenylmethoxy)-3-pyridinyl]- (CA INDEX NAME)



RN 690260-33-4 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 2'-[6-chloro-3-(phenylmethoxy)-2-pyridinyl]- (CA INDEX NAME)

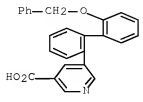


RN 690260-34-5 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 5-amino-2'-[6-chloro-3-(phenylmethoxy)-2-pyridinyl]- (CA INDEX NAME)

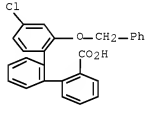


RN 690260-35-6 ZCAPLUS

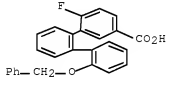
CN 3-Pyridinecarboxylic acid, 5-[2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]-
(CA INDEX NAME)



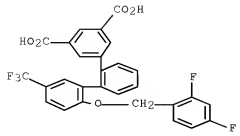
RN 690260-36-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4''-chloro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



RN 690260-37-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 6-fluoro-2''-(phenylmethoxy)-
(9CI) (CA INDEX NAME)



IT 690261-75-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of benzoic acids and related compds. as EP1 receptor
antagonists for the treatment of prostaglandin mediated diseases.)
RN 690261-75-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3,5-dicarboxylic acid, 2''-[(2,4-
difluorophenyl)methoxy]-5''-(trifluoromethyl)- (9CI) (CA INDEX NAME)



IT 690260-39-0P 690260-42-5P 690260-45-8P
690260-47-0P 690260-49-2P 690260-50-5P
690260-51-6P 690260-52-7P 690260-53-8P
690260-54-9P 690260-55-0P 690260-57-2P
690260-60-7P 690260-61-8P 690260-62-9P
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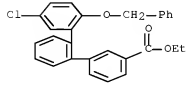
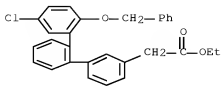
690260-74-3P 690260-75-4P 690260-77-6P
690260-78-7P 690260-79-8P 690260-81-2P
690260-82-3P 690261-01-9P 690261-06-4P
690261-07-5P 690261-08-6P 690261-09-7P
690261-10-0P 690261-12-2P 690261-13-3P
690261-14-4P 690261-15-5P 690261-16-6P
690261-17-7P 690261-18-8P 690261-19-9P
690261-20-2P 690261-21-3P 690261-22-4P
690261-23-5P 690261-24-6P 690261-25-7P
690261-26-8P 690261-27-9P 690261-30-4P
690261-32-6P 690261-33-7P 690261-36-0P
690261-37-1P 690261-40-6P 690261-41-7P
690261-42-8P 690261-44-0P 690261-45-1P
690261-48-4P 690261-49-5P 690261-50-8P
690261-52-0P 690261-55-3P 690261-56-4P
690261-57-5P 690261-61-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzoic acids and related compds. as EP1 receptor antagonists for the treatment of prostaglandin mediated diseases.)

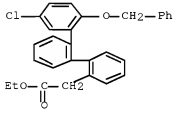
RN 690260-39-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



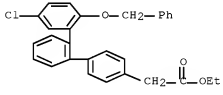
RN 690260-42-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-acetic acid, 5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



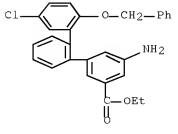
RN 690260-45-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-acetic acid, 5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



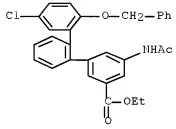
RN 690260-47-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-4-acetic acid, 5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



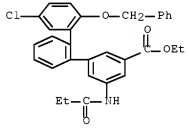
RN 690260-49-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-amino-5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



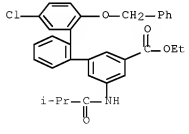
RN 690260-50-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(acetylamino)-5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



RN 690260-51-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(1-oxopropyl)amino]-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)

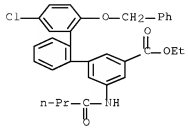


RN 690260-52-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(2-methyl-1-oxopropyl)amino]-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



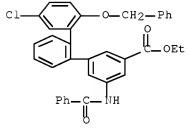
RN 690260-53-8 ZCAPLUS

CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(1-oxobutyl)amino]-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



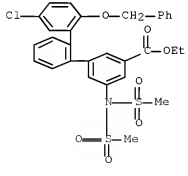
RN 690260-54-9 ZCAPLUS

CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(benzoylamino)-5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



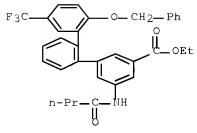
RN 690260-55-0 ZCAPLUS

CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[bis(methylsulfonyl)amino]-5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)

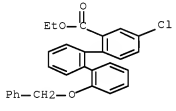


RN 690260-57-2 ZCAPLUS

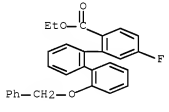
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[(1-oxobutyl)amino]-2''-(phenylmethoxy)-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



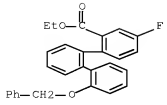
RN 690260-60-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



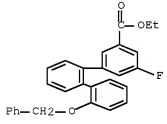
RN 690260-61-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5-fluoro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



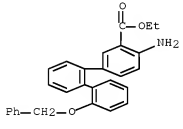
RN 690260-62-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-fluoro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



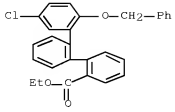
RN 690260-63-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-fluoro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



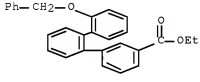
RN 690260-64-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 4-amino-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



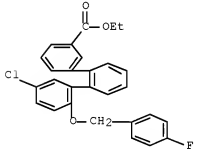
RN 690260-65-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



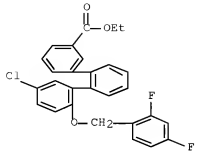
RN 690260-66-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



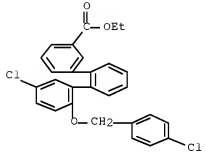
RN 690260-72-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-fluorophenyl)methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



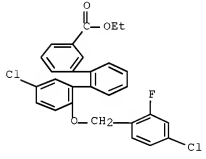
RN 690260-73-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(2,4-difluorophenyl)methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



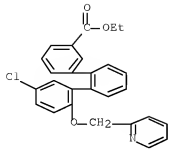
RN 690260-74-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-chlorophenyl)methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



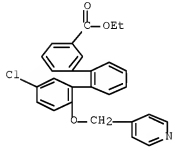
RN 690260-75-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-[(4-chloro-2-fluorophenyl)methoxy]-, ethyl ester (9CI) (CA INDEX NAME)



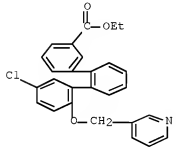
RN 690260-77-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(2-pyridinylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



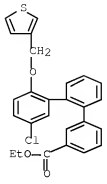
RN 690260-78-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(4-pyridinylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



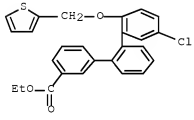
RN 690260-79-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(3-pyridinylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



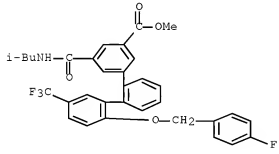
RN 690260-81-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(3-thienylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



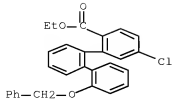
RN 690260-82-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(2-thienylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



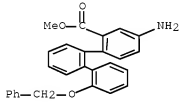
RN 690261-01-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[[(2-methylpropyl)amino]carbonyl]-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



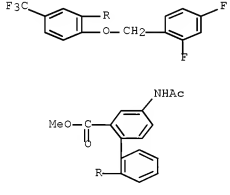
RN 690261-06-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 5-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



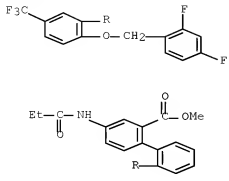
RN 690261-07-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-amino-2''-(phenylmethoxy)-, methyl ester (9CI) (CA INDEX NAME)



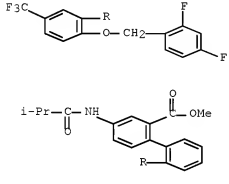
RN 690261-08-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-[(2,4-difluorophenyl)methoxy]-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



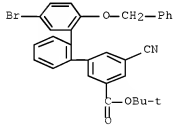
RN 690261-09-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-[(1-oxopropyl)amino]-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



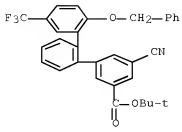
RN 690261-10-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-[(2-methyl-1-oxopropyl)amino]-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



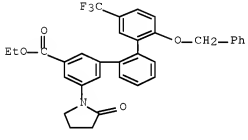
RN 690261-12-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-bromo-5-cyano-2''-(phenylmethoxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



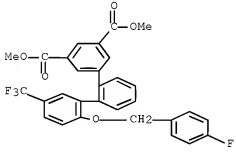
RN 690261-13-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-cyano-2''-(phenylmethoxy)-5''-(trifluoromethyl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



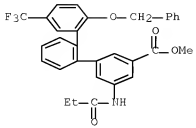
RN 690261-14-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-(2-oxo-1-pyrrolidinyl)-2''-(phenylmethoxy)-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



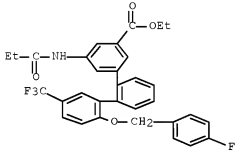
RN 690261-15-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3,5-dicarboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)-, dimethyl ester (9CI) (CA INDEX NAME)



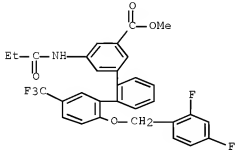
RN 690261-16-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[(1-oxopropyl)amino]-2''-(phenylmethoxy)-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



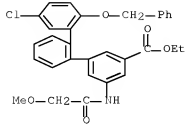
RN 690261-17-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(4-fluorophenyl)methoxy]-5-[(1-oxopropyl)amino]-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



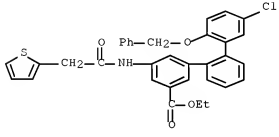
RN 690261-18-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-5-[(1-oxopropyl)amino]-5''-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



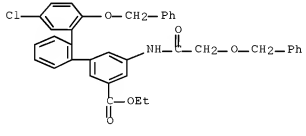
RN 690261-19-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(methoxyacetyl)amino]-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



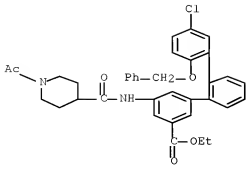
RN 690261-20-2 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-5-[(2-thienylacetyl)amino]-, ethyl ester (9CI) (CA INDEX NAME)



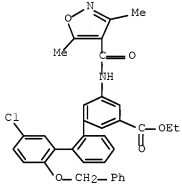
RN 690261-21-3 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-2''-(phenylmethoxy)-5-[[(phenylmethoxy)acetyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)



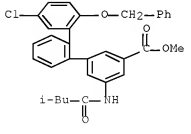
RN 690261-22-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5-[[(1-acetyl-4-piperidinyl)carbonyl]amino]-5''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



RN 690261-23-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[[(3,5-dimethyl-4-isoxazolyl)carbonyl]amino]-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



RN 690261-24-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[(3-methyl-1-oxobutyl)amino]-2''-(phenylmethoxy)-, methyl ester (9CI) (CA INDEX NAME)



RN 690261-25-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-chloro-5-[[[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]acetyl]amino]-2''-(phenylmethoxy)-, methyl ester

(9CI) (CA INDEX NAME)

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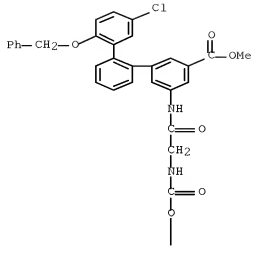
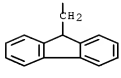
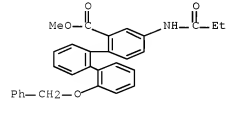


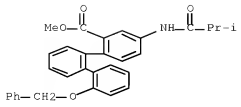
PAGE 2-A



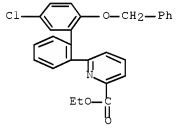
RN 690261-26-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-[(1-oxopropyl)amino]-2''-(phenylmethoxy)-, methyl ester (9CI) (CA INDEX NAME)



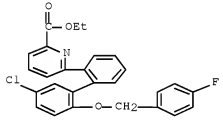
RN 690261-27-9 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-[(2-methyl-1-oxopropyl)amino]-2''-(phenylmethoxy)-, methyl ester (9CI) (CA INDEX NAME)



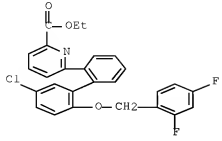
RN 690261-30-4 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



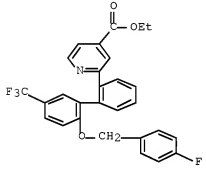
RN 690261-32-6 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(4-fluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



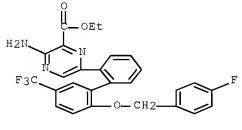
RN 690261-33-7 ZCAPLUS
CN 2-Pyridinecarboxylic acid, 6-[5'-chloro-2'-[(2,4-difluorophenyl)methoxy][1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



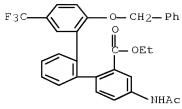
RN 690261-36-0 ZCAPLUS
CN 4-Pyridinecarboxylic acid, 2-[2'-[(4-fluorophenyl)methoxy]-5'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



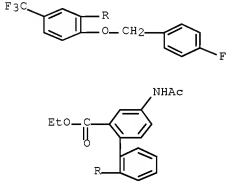
RN 690261-37-1 ZCAPLUS
CN 2-Pyrazinecarboxylic acid, 3-amino-6-[2'-[(4-fluorophenyl)methoxy]-5'-(trifluoromethyl)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



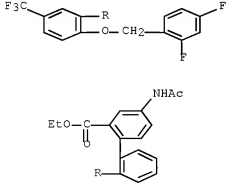
RN 690261-40-6 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-(phenylmethoxy)-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



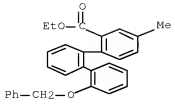
RN 690261-41-7 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-[(4-fluorophenyl)methoxy]-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



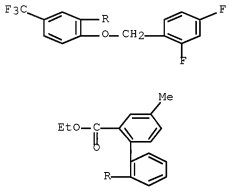
RN 690261-42-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-(acetylamino)-2''-[(2,4-difluorophenyl)methoxy]-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



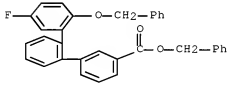
RN 690261-44-0 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4-methyl-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)



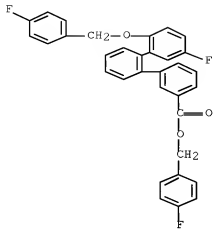
RN 690261-45-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-4-methyl-5''-(trifluoromethyl)-, ethyl ester (9CI) (CA INDEX NAME)



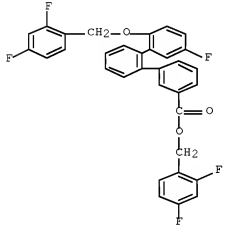
RN 690261-48-4 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-fluoro-2''-(phenylmethoxy)-, phenylmethyl ester (9CI) (CA INDEX NAME)



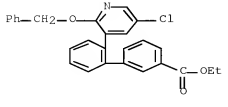
RN 690261-49-5 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 5''-fluoro-2''-[(4-fluorophenyl)methoxy]-, (4-fluorophenyl)methyl ester (9CI) (CA INDEX NAME)



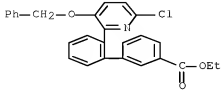
RN 690261-50-8 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-3-carboxylic acid, 2''-[(2,4-difluorophenyl)methoxy]-5''-fluoro-, (2,4-difluorophenyl)methyl ester (9CI) (CA INDEX NAME)



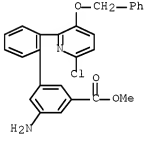
RN 690261-52-0 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 2'-[5-chloro-2-(phenylmethoxy)-3-pyridinyl]-, ethyl ester (CA INDEX NAME)



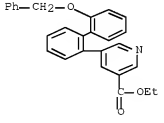
RN 690261-55-3 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 2'-[6-chloro-3-(phenylmethoxy)-2-pyridinyl]-, ethyl ester (CA INDEX NAME)



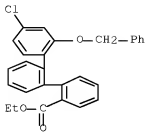
RN 690261-56-4 ZCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 5-amino-2'-[6-chloro-3-(phenylmethoxy)-2-pyridinyl]-, methyl ester (CA INDEX NAME)



RN 690261-57-5 ZCAPLUS
CN 3-Pyridinecarboxylic acid, 5-[2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]-, ethyl ester (CA INDEX NAME)



RN 690261-61-1 ZCAPLUS
CN [1,1':2',1''-Terphenyl]-2-carboxylic acid, 4''-chloro-2''-(phenylmethoxy)-, ethyl ester (9CI) (CA INDEX NAME)




L50 ANSWER 9 OF 13 ZCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:154202 ZCAPLUS Full-text
DOCUMENT NUMBER: 138:187653
TITLE: Preparation of tetracyclic tetrahydroquinoline inhibitors of serine proteases as antithrombotic agents
INVENTOR(S): Zhou, Jinglan; Robinson, Leslie; Gubernator, Nikolaus; Saiah, Eddine; Bai, Xu; Gu, Xin
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 311 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003015715 | A2 | 20030227 | WO 2002-US26967 | 20020820 |
| WO 2003015715 | A3 | 20031120 | | |
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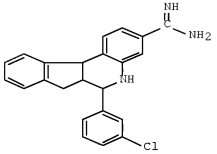
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2002331707 | A1 | 20030303 | AU 2002-331707 | 20020820 |
| US 20030225110 | A1 | 20031204 | US 2002-223860 | 20020820 |
| US 6825208 | B2 | 20041130 | | |
| EP 1425015 | A2 | 20040609 | EP 2002-768687 | 20020820 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |

PRIORITY APPLN. INFO.: US 2001-313549P P 20010820
WO 2002-US26967 W 20020820
OTHER SOURCE(S): MARPAT 138:187653
GI

I



II

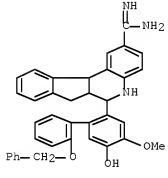
AB This invention relates generally to tetracyclic tetrahydroquinoline compds. (shown as I; variables defined below; e.g. 6-(3-chlorophenyl)- 5,6a,7,11b-tetrahydro-6H-indeno[2,1-c]quinoline-3-carboxamidine), and analogs thereof, and pharmaceutically acceptable salt forms thereof, which are selective inhibitors of serine protease enzymes, especially factor VIIa; pharmaceutical compns. containing the same; and methods of using the same as anticoagulant agents for modulation of the coagulation cascade. Although the methods of preparation are not claimed, 240 example prepns. are included. Compds. I demonstrated Ki values of ≤50 μM in assays of inhibition of 5 coagulation factors; values for specific I are not given. For I: X is -NH-, -O-, -S-, -S(O)-, or -S(O)2-; ring A, including the two atoms of Ring B to which it is attached, is a Ph ring; wherein, in addition to RA, ring A is substituted with 0-3 RAA; alternatively, ring A, including the two atoms of Ring B to which it is attached, is a 5-6 membered aromatic system consisting of C atoms and 1 or 2 N atoms, and ring A, in addition to RA, is substituted with 0-3 RAA; alternatively ring A and substituent RA, including the two atoms of Ring B to which ring A is attached, is a 5-6 membered heterocyclic ring; alternatively ring A and substituent RA, including the two atoms of Ring B to which Ring A is attached, is a Ph ring wherein RA is combined with RAA and two C atoms of Ring A to form a cyclic group. RA = F, Cl, Br, OH, OCH3, OCH2CH3, OCHMe2, -OCH2CH2CH3, -OCF3, -CN, -NH2, -NH2NH3, C(:NR1)NR2R3, R-NHC(:NR1)NR2R3, -NR2CH(:NR1), -C(O)NR2R3, -S(O)2NR2aR31, -NR2R3, -CH2NR2R3, -CH2CH2NR2R3, -CHMeNR2R3, -CH2CH2CH2NR2R3, -CH2CHMeNR2R3, -CHEtNR2R3, -CHMeCH2NR2R3, -CMe2NR2R3, -(C1-3alkyl)CO2H, -O-(C1-3 alkyl)CO2H, -S-(C1-3 alkyl)CO2H, and -(C1-3 alkyl)CH(NH2)CO2H, -C(O)NHCH2CH2NH(C1-3 alkyl), -C(O)NHCH2CH2N(C1-3 alkyl)2, -CH2NCOO(C1-4 alkyl), imidazol-1-yl, substituted 2,5-dihydro-5-oxopyrazol-3-yl, 4,5-dihydroimidazol-2-ylamino, and 1,4,5,6-tetrahydropyrimidin-2-ylamino. RB is a 5-10 membered ring system consisting of C atoms and 0, 1 or 2 heteroatoms N, O, and S; wherein said ring system may be unsatd., partially unsatd. or saturated; and RB is substituted with 0-5 substituents = Rb1, Rb2, Rb3, Rb4, and Rb5; alternatively RB is C1-4 alkyl substituted with 5-10 membered ring system consisting of C atoms and 0, 1 or 2 heteroatoms N, O, and S; wherein said ring system may be unsatd., partially unsatd. or saturated; and RB is substituted with 0-5 substituents = Rb1, Rb2, Rb3, Rb4, and Rb5. N is 1, 2, or 3; RC1 = H, halo, -CN, -NO2, OR12, SR12, NR12R13, C(O)H, C(O)R12, C(O)NR12R13, OC(O)NR12R13, NR14C(O)R12, NR14C(S)R12, C(O)OR12, OC(O)R12, OC(O)OR12, CH(:NR14)NR12R13, NHC(:NR14)NR12R13, S(O)R12, S(O)2R12, S(O)NR12R13, S(O)2NR12R13, NR14S(O)R12, NR14S(O)2R12, NR12C(O)R15,

NR12C(S)R15, NR12C(O)OR15, NR12S(O)2R15, NR12C(O)NHR15, C1-4 haloalkyl, (C1-4 haloalkyl)oxy, C1-10 alkyl substituted with 0-3 RCC, C2-10 alkenyl substituted with 0-3 RCC, C2-10 alkynyl substituted with 0-3 RCC, C1-10 alkoxy substituted with 0-3 RCC, C3-6 carbocyclic residue substituted with 0-3 RCC, aryl substituted with 0-5 RCC, and 5-6 membered heterocyclic ring system containing = 1-4 heteroatoms N, O, and S substituted with 0-3 RCC; RC2 = H, C1-4 alkyl, OH, CN, and C1-4 alkoxy. Ring D, including the two atoms of Ring C to which it is attached, is a 5-6 membered aromatic system consisting of C atoms and 0, 1 or 2 heteroatoms N, O, and S; and ring D is substituted with 0-4 RD; addnl. details regarding the above variables are given in the claims.

IT 499217-88-8P, 6-(2'-Benzyloxy-5-hydroxy-4-methoxybiphenyl-2-yl)-5,6a,7,11b-tetrahydro-6H-indeno[2,1-c]quinoline-2-carboxamidine
499218-30-3P, 6-(2-Aminomethyl-5,6a,7,11b-tetrahydro-6H-indeno[2,1-c]quinolin-6-yl)-2'-benzyloxy-4-methoxybiphenyl-3-ol
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of tetracyclic tetrahydroquinoline inhibitors of serine proteases as antithrombotic agents)

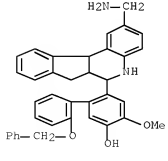
RN 499217-88-8 ZCAPLUS

CN 5H-Indeno[2,1-c]quinoline-2-carboximidamide, 6,6a,7,11b-tetrahydro-6-[5-hydroxy-4-methoxy-2'-(phenylmethoxy)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)




RN 499218-30-3 ZCAPLUS

CN [1,1'-Biphenyl]-3-ol, 6-[2-(aminomethyl)-6,6a,7,11b-tetrahydro-5H-indeno[2,1-c]quinolin-6-yl]-4-methoxy-2'-(phenylmethoxy)- (CA INDEX NAME)



L50 ANSWER 10 OF 13 BEILSTEIN COPYRIGHT 2008 BEILSTEIN MDL on STN

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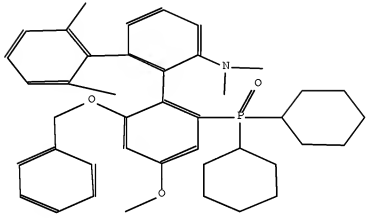
|---|---|
| Beilstein Records (BRN): | 10961913 |
| Molec. Formula (MF): | C42 H52 N O3 P |
| Molecular Weight (MW): | 649.85 |
| Lawson Number (LN): | 16731, 16730, 5228, 2817, 289 |
| Compound Type (CTYPE): | isocyclic |
| Constitution ID (CONSID): | 9165571 |
| Tautomer ID (TAUTID): | 10214894 |
| Entry Date (DED): | 2008/01/25 |
| Update Date (DUPD): | 2008/01/25 |




Field Availability:

| Code | Name | Occurrence |
|---|---|---|
| BRN | Beilstein Records | 1 |
| MF | Molecular Formula | 1 |
| FW | Formular Weight | 1 |
| LN | Lawson Number | 5 |
| CTYPE | Compound Type | 1 |
| CONSID | Constitution ID | 1 |
| TAUTID | Tautomer ID | 1 |
| ED | Entry Date | 1 |
| UPD | Update Date | 1 |

This substance also occurs in Reaction Documents:

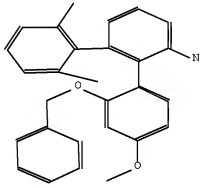
| Code | Name | Occurrence |
|---|---|---|
| RX | Reaction Documents | 1 |
| RXPRO | Substance is Reaction Product | 1 |

All References:
ALLREF

1. Ashburn, Bradley O.; Carter, Rich G.; Zakharov, Lev N., J. Am. Chem. Soc., CODEN: JACSAT, SIR129(29), <2007>, 9109 - 9116; BABS-6702500

L50 ANSWER 11 OF 13 BEILSTEIN COPYRIGHT 2008 BEILSTEIN MDL on STN

| | |
|---|---|
| Beilstein Records (BRN): | 10932565 |
| Molec. Formula (MF): | C28 H27 N O2 |
| Molecular Weight (MW): | 409.53 |
| Lawson Number (LN): | 15281, 5228, 289 |
| Compound Type (CTYPE): | isocyclic |
| Constitution ID (CONSID): | 9141835 |
| Tautomer ID (TAUTID): | 10184903 |
| Entry Date (DED): | 2008/01/25 |
| Update Date (DUPD): | 2008/01/25 |




Field Availability:

| Code | Name | Occurrence |
|---|---|---|
| BRN | Beilstein Records | 1 |
| MF | Molecular Formula | 1 |
| FW | Formular Weight | 1 |
| LN | Lawson Number | 3 |
| CTYPE | Compound Type | 1 |
| CONSID | Constitution ID | 1 |
| TAUTID | Tautomer ID | 1 |
| ED | Entry Date | 1 |
| UPD | Update Date | 1 |

This substance also occurs in Reaction Documents:

| Code | Name | Occurrence |
|---|---|---|
| RX | Reaction Documents | 1 |
| RXPRO | Substance is Reaction Product | 1 |

All References:
ALLREF

1. Ashburn, Bradley O.; Carter, Rich G.; Zakharov, Lev N., J. Am. Chem. Soc., CODEN: JACSAT, SIR129(29), <2007>, 9109 - 9116; BABS-6702500

L50 ANSWER 12 OF 13 BEILSTEIN COPYRIGHT 2008 BEILSTEIN MDL on STN

| | |
|---|---|
| Beilstein Records (BRN): | 9109439 |
| Chemical Name (CN): | 2-<4'-(tert-butyl-dimethyl-silanyloxymethyl)-6-methoxy-4,2',6'-tris-(4-methoxy-benzyloxy)-biphenyl-2-yl>-4,4-dimethyl-4,5-dihydro-oxazole |
| Autonom Name (AUN): | 2-<4'-(tert-butyl-dimethyl-silanyloxymethyl)-6-methoxy-4,2',6'-tris-(4-methoxy-benzyloxy)-biphenyl-2-yl>-4,4-dimethyl-4,5-dihydro-oxazole |
| Molec. Formula (MF): | C49 H59 N O9 Si |
| Molecular Weight (MW): | 834.09 |
| Lawson Number (LN): | 31103, 5917, 3798, 3777, 289 |
| Compound Type (CTYPE): | heterocyclic |
| Constitution ID (CONSID): | 7699321 |
| Tautomer ID (TAUTID): | 8554879 |
| Entry Date (DED): | 2002/07/19 |
| Update Date (DUPD): | 2002/07/19 |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Field Availability:

| Code | Name | Occurrence |
|---|---|---|
| BRN | Beilstein Records | 1 |
| CN | Chemical Name | 1 |
| AUN | Autonomname | 1 |
| MF | Molecular Formula | 1 |
| FW | Formular Weight | 1 |
| LN | Lawson Number | 5 |
| CTYPE | Compound Type | 1 |
| CONSID | Constitution ID | 1 |
| TAUTID | Tautomer ID | 1 |
| ED | Entry Date | 1 |
| UPD | Update Date | 1 |

This substance also occurs in Reaction Documents:

| Code | Name | Occurrence |
|---|---|---|
| RX | Reaction Documents | 1 |
| RXPRO | Substance is Reaction Product | 1 |

All References:
ALLREF

1. Fuerstner, Alois; Stelzer, Frank; Rumbo, Antonio; Krause, Helga,

Chem.Europ.J., CODEN: CEUJED, 8(8), <2002>, 1856 - 1871; BABS-6340976

L50 ANSWER 13 OF 13 BEILSTEIN COPYRIGHT 2008 BEILSTEIN MDL on STN

| | |
|---|---|
| Beilstein Records (BRN): | 9107305 |
| Chemical Name (CN): | 2-<4'-(tert-butyl-dimethyl-silanyloxymethyl)-6-methoxy-2',6'-bis-(4-methoxy-benzyloxy)-4-methoxymethoxy-biphenyl-2-yl>-4,4-dimethyl-4,5-dihydro-oxazole |
| Autonom Name (AUN): | 2-<4'-(tert-butyl-dimethyl-silanyloxymethyl)-6-methoxy-2',6'-bis-(4-methoxy-benzyloxy)-4-methoxymethoxy-biphenyl-2-yl>-4,4-dimethyl-4,5-dihydro-oxazole |
| Molec. Formula (MF): | C43 H55 N O9 Si |
| Molecular Weight (MW): | 757.99 |
| Lawson Number (LN): | 31103, 5917, 3798, 3777, 689, 289 |
| Compound Type (CTYPE): | heterocyclic |
| Constitution ID (CONSID): | 7697695 |
| Tautomer ID (TAUTID): | 8552823 |
| Entry Date (DED): | 2002/07/19 |
| Update Date (DUPD): | 2002/07/19 |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Field Availability:

| Code | Name | Occurrence |
|---|---|---|
| BRN | Beilstein Records | 1 |
| CN | Chemical Name | 1 |
| AUN | Autonomname | 1 |
| MF | Molecular Formula | 1 |
| FW | Formular Weight | 1 |
| LN | Lawson Number | 6 |
| CTYPE | Compound Type | 1 |
| CONSID | Constitution ID | 1 |
| TAUTID | Tautomer ID | 1 |
| ED | Entry Date | 1 |
| UPD | Update Date | 1 |

This substance also occurs in Reaction Documents:

| Code | Name | Occurrence |
|---|---|---|
| RX | Reaction Documents | 1 |
| RXPRO | Substance is Reaction Product | 1 |

All References:
ALLREF

1. Fuerstner, Alois; Stelzer, Frank; Rumbo, Antonio; Krause, Helga, Chem.Europ.J., CODEN: CEUJED, 8(8), <2002>, 1856 - 1871; BABS-6340976

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    reclassified documents, but they can be identified by
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    20071130/UPIC. <<<

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    http://www.stn-international.de/stndatabases/details/epc_0803.zip
    Supplement of all changed ECLA items:
    http://www.stn-international.de/stndatabases/details/ecla_0803s.zip <<<

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L1              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.
L3              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

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G1

G1 [@1],[@2]

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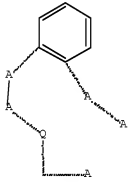
L9 STR



Structure attributes must be viewed using STN Express query preparation.
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PROCESSING COMPLETED FOR L53
L54 10 DUP REM L12 L53 (2 DUPLICATES REMOVED)
ANSWERS '1-9' FROM FILE ZCAPLUS
ANSWER '10' FROM FILE WPIX

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L54 ANSWER 10 OF 10 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2007-524981 [51] WPIX Full-text
DOC. NO. CPI: C2007-193716 [51]
TITLE: New diarylimidazole compounds are cannabinoid receptor modulators used for treatment or prophylaxis of e.g. obesity, psychiatric disorders, schizophrenia and bipolar disorders, anxiety, depression, cancer and cognitive disorders
DERWENT CLASS: B03
INVENTOR: AHLQVIST M; CHENG L; LUNDQVIST R; SOERENSEN H
PATENT ASSIGNEE: (ASTR-C) ASTRAZENECA AB; (ASTR-C) ASTRAZENECA UK LTD
COUNTRY COUNT: 115

PATENT INFO ABBR.:

| PATENT NO | KIND | DATE | WEEK | LA | PG | MAIN IPC |
|---|---|---|---|---|---|---|
| WO 2007031720 | A1 | 20070322 | (200751)* | EN | 55[0] | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---|---|---|---|
| WO 2007031720 | A1 | WO 2006-GB3356 | 20060912 |

PRIORITY APPLN. INFO: GB 2005-18817 20050915
AN 2007-524981 [51] WPIX Full-text
AB WO 2007031720 A1 UPAB: 20070809
NOVELTY - Diarylimidazole compounds (I) in the form of their methanesulfonate salts (mesylate salt), hemi-1,5-naphthalenedisulfonate salts, hemi-1,2-ethanedisulfonic acid salts, ethylsulfonate salts, nitrate salts, hydrochloride salts, sulfate salts and hydrogen sulfate salts, are new.

DETAILED DESCRIPTION - Diarylimidazole compounds of formula (I) in the form of their methanesulfonate salts (mesylate salts), hemi-1,5-naphthalenedisulfonate salts, hemi-1,2-ethanedisulfonic acid salts, ethylsulfonate salts and nitrate salts, are new.

R1 = 1-10C alkoxy (optionally substituted by F), phenyl(CH2)pO (optionally substituted by 1-3 Z), R5S(O)2O, R5S(O)2NH or (R6)3Si;

p = 1-3;

R5 = 1-10C alkyl (optionally substituted by F), or phenyl or heteroaryl (both optionally substituted by 1-3 Z);

R6 = 1-6C alkyl;

Ra = halo 1-3C alkyl or 1-3C alkoxy;

R2 = 1-3C alkyl, 1-3 alkoxy, OH, NO2, CN or halo;

R2 = 1-3C alkyl, 1-3C alkoxy, OH, NO2, CN or halo;

R3 = X-Y1-NR7R8;

X = CO or SO2;

Y1 = NH, 1-3C alkyl;

R8 = 1-6C alkyl, 3-15C cycloalkyl, (3-15C cycloalkyl)1-3C alkylene (all optionally substituted by 1-3 W1), (-CH2)r(phenyl)s (optionally substituted by 1-3 Z), saturated 5-8 membered heterocyclic group (containing 1 N and optionally O, S or an additional N and optionally substituted by 1-3C alkyl, OH or benzyl), -(CH2)tHet, where the alkylene chain is optionally substituted by 1-3C alkyl; and

R7 = H or R8; or

NR7R8 = saturated or partially unsaturated 5-8 membered heterocyclic group (containing 1 N and optionally one of O, S or an additional N and optionally substituted by 1-3C alkyl, OH, F or benzyl), oxazolyl, isoxazolyl,

thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, pyrrolyl, pyrazolyl, imidazolyl, triazolyl, tetrazolyl, thienyl, furyl or oxazolinyl (all optionally substituted by 1-3 Z);

R4 = H, 1-6C alkyl, 1-6C alkoxy, 1-6C alkoxyl-6C alkylene (which contains a maximum of 6 C atoms and all optionally substituted by F or CN);

Z = 1-3C alkyl, 1-3C alkoxy, OH, halo, -CF3, trifluoromethylthio, difluoromethoxy, -OCF3, trifluoromethylsulfonyl, NO2, amino, mono or di1-3c alkylamino, 1-3C alkylsulfonyl, 1-3C alkoxycarbonyl, carboxy, CN, carbamoyl, mono or di-1-3C alkyl carbamoyl and acetyl;

W1 = OH, F, 1-3C alkyl, 1-3C alkoxy, NH2, mono or di1-3C alkylamino or a heterocyclic amine of morpholinyl, pyrrolidinyl, piperidinyl or piperazinyl in which the heterocyclic amine is optionally substituted by 1-3C alkyl or OH;

m = 0-3;

n = 0-3;

r = 0-4; and

t = 0-4,

provided that r is 0 otherwise s is 1 or 2; when n is 1 then R2 is not -OCH3 in either the 2-position or the 4- position of the phenyl ring; and R1 is not methylsulfonylamino, -OCH3 or CF3O.

ACTIVITY - Anorectic; Neuroleptic; Tranquilizer; Antidepressant; Nootropic; Anabolic; Eating-Disorders-Gen.; Anticonvulsant; Neuroprotective; Antiparkinsonian; Immunomodulator; Cardiovascular-Gen.; Gynecological; Endocrine-Gen.; Antibacterial; Immunosuppressive; Respiratory-Gen.; Gastrointestinal-Gen.; Vasotropic; Antismoking; Hypnotic; Cerebroprotective; Anticoagulant; Analgesic; Antianginal; Antiinfertility; Contraceptive; Antiinflammatory; Hepatotropic; Antiasthmatic; Cytostatic; Antiarthritic.

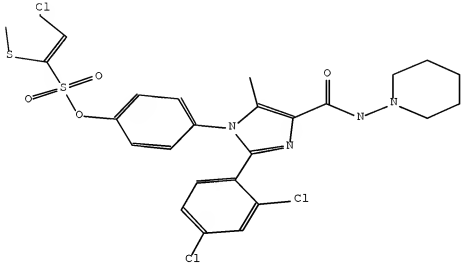
MECHANISM OF ACTION - Cannabinoid receptor modulator.

In an assay used to determine affinity for central cannaboid receptors as described in Devane et al, Molecular Pharmacology, 1988, 34,605, using membranes prepared from cells stably transfected with the CB 1 gene, results showed that (I) exhibited IC50 values of less than 200 nm.

USE - Used for the treatment or prophylaxis of obesity, psychiatric disorders such as psychotic disorders, schizophrenia and bipolar disorders, anxiety, anxio-depressive disorders, depression, cognitive disorders, memory disorders, obsessive-compulsive disorders, anorexia, bulimia, attention disorders, epilepsy and related conditions, neurological disorders, Parkinson's disease, Huntington's chorea, Alzheimer's disease, immune, cardiovascular, reproductive and endocrine disorders, septic shock, diseases related to the respiratory and gastrointestinal systems and extended abuse, addiction and/or relapse indications (claimed). (I) are useful e.g. to prevent weight gain, for modulation of appetite and/or satiety, eating disorders, to treat Tourette's syndrome, multiple sclerosis, Raynaud's syndrome, nicotine withdrawal, sleep disorder, cranial trauma, sleep apnea, stroke, cerebral apoplexy, ischemia, cerebral thrombosis, metabolic syndrome, syndrome X, reproductive and endocrine disorders, infertility, contraceptive, gastrointestinal systems, cholelithiasis, asthma, chronic obstructive pulmonary disease, cancer, Prader-Willi syndrome, arthritis and orthopedic disorders.

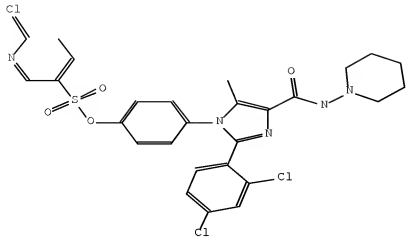
ADVANTAGE - (I) are in crystalline form. (I) are more efficacious, less toxic, longer acting, more potent and more easily absorbed. (I) has a broader range of activity, a better pharmacokinetic profile (e.g. higher oral bioavailability and/or lower clearance) and pharmacological, physical or chemical properties. (I) are administered less frequently. (I) exhibits improved ease of handling. (I) may be produced in forms which may have improved chemical and/or solid state stability (e.g. due to lower hygroscopicity). (I) are stable over prolonged periods. (I) are crystallised in good yields, in a high purity and at a low cost. (I) has potency, selectivity profile, half-life in plasma, blood brain permeability, plasma protein binding (higher free fraction of drug) or solubility.

CN.S THIOPHENE-2-SULFONIC ACID 4-[2-(2,4-DICHLORO-PHENYL)-5-METHYL-4-(PIPERIDIN-1-YLCARBAMOYL)-IMIDAZOL-1-YL]-PHENYL ESTER HYDROCHLORIDE
SDCN RAQW9I



AN.S DCR-1502117
CN.S 5-Chloro-thiophene-2-sulfonic acid 4-[2-(2,4-dichloro-phenyl)-5-methyl-4-(piperidin-1-ylcarbamoyl)-imidazol-1-yl]-phenyl ester hydrochloride
SDCN RAQW9P

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
AN.S DCR-1502378
CN.S Pyridine-3-sulfonic acid 4-[2-(2,4-dichloro-phenyl)-5-methyl-4-(piperidin-1-ylcarbamoyl)-imidazol-1-yl]-phenyl ester hydrochloride
SDCN RAQW9R


Cl
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Cl
Cl

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=> d his full

     (FILE 'HOME' ENTERED AT 10:01:19 ON 12 MAY 2008)

     FILE 'REGISTRY' ENTERED AT 10:01:23 ON 12 MAY 2008
L1                STRUCTURE UPLOADED
L2              0 SEA SSS SAM L1
L3                STRUCTURE UPLOADED
L4                STRUCTURE UPLOADED
L5                SCREEN 1841
L6                SCREEN 1946
L7        5110201 SEA ABB=ON  PLU=ON  46.150.18/RID AND NRS>3
L8              0 SEA SUB=L7 SSS SAM (L1 AND L3 AND L4) AND (L5 AND L6)
L9                STRUCTURE UPLOADED
L10             1 SEA SUB=L7 SSS SAM (L1 AND L3 AND L4 AND L9) AND (L5 AND L6)
                  D SCA
L11           239 SEA SUB=L7 SSS FUL (L1 AND L3 AND L4 AND L9) AND (L5 AND L6)
                  SAVE TEMP VAL036ST1349/A L11

     FILE 'ZCAPLUS' ENTERED AT 10:13:16 ON 12 MAY 2008
L12             9 SEA ABB=ON  PLU=ON  L11
                  D BIB HITSTR L12 9
                  E US2006-533036   /APPS
L13             2 SEA ABB=ON  PLU=ON  US2006-533036   /AP
                  D SCA
L14             1 SEA ABB=ON  PLU=ON  US2005-533036   /AP
                  D SCA
                  D AU
L15             1 SEA ABB=ON  PLU=ON  L12 AND L14
                  D SCA
                  SEL RN
                  SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 10:17:27 ON 12 MAY 2008
L16           295 SEA ABB=ON  PLU=ON  (100-39-0/BI OR 100398-25-2/BI OR 1007-16-5
                  /BI OR 107-82-4/BI OR 108-24-7/BI OR 121-43-7/BI OR 124-63-0/BI
                   OR 13659-23-9/BI OR 136808-72-5/BI OR 137628-16-1/BI OR
                  14067-99-3/BI OR 141-43-5/BI OR 141-75-3/BI OR 150255-96-2/BI
                  OR 176548-70-2/BI OR 179897-94-0/BI OR 188057-26-3/BI OR
                  188815-32-9/BI OR 190661-29-1/BI OR 200956-32-7/BI OR 202409-82
                  -3/BI OR 204841-19-0/BI OR 207115-22-8/BI OR 20986-40-7/BI OR
                  21190-88-5/BI OR 21739-93-5/BI OR 21856-53-1/BI OR 22921-67-1/B
                  I OR 23915-07-3/BI OR 244205-40-1/BI OR 26628-22-8/BI OR
                  353743-43-8/BI OR 363-24-6/BI OR 3637-61-4/BI OR 3731-52-0/BI
                  OR 380430-56-8/BI OR 3808-91-1/BI OR 402-45-9/BI OR 41288-96-4/
                  BI OR 4214-79-3/BI OR 4334-87-6/BI OR 459-46-1/BI OR 4635-59-0/
                  BI OR 5419-55-6/BI OR 557-21-1/BI OR 583-53-9/BI OR 60-12-8/BI
                  OR 612832-83-4/BI OR 612833-40-6/BI OR 612833-41-7/BI OR
                  612833-60-0/BI OR 612833-61-1/BI OR 612833-62-2/BI OR 612833-63
                  -3/BI OR 612833-64-4/BI OR 612833-65-5/BI OR 612833-66-6/BI OR
                  612833-67-7/BI OR 612833-68-8/BI OR 612833-69-9/BI OR 612833-70
                  -2/BI OR 612833-71-3/BI OR 612833-72-4/BI OR 612833-73-5/BI OR
                  6307-83-1/BI OR 690259-48-4/BI OR 690259-49-5/BI OR 690259-50-8
                  /BI OR 690259-51-9/BI OR 690259-52-0/BI OR 690259-53-1/BI OR
                  690259-54-2/BI OR 690259-55-3/BI OR 690259-56-4/BI OR 690259-57
                  -5/BI OR 690259-58-6/BI OR 690259-59-7/BI OR 690259-60-0/BI OR
                  690259-61-1/BI OR 690259-62-2/BI OR 690259-63-3/BI OR 690259-64
                  -4/BI OR 690259-65-5/BI OR 690259-66-6/BI OR 690259-67-7/BI OR
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                690259-68-8/BI OR 690259-69-9/BI OR 690259-70-2/BI OR 690259-71
                -3/BI OR 690259-72-4/BI OR 690259-73-5/BI OR 690259-74-6/BI OR
                690259-75-7/BI OR 690259-76-8/BI OR 690259-77-9/BI OR 690259-78
                -0/BI OR 690259-79-1/BI OR 690259-80-4/BI OR 690259-81-5/BI OR
                690259-82-6/BI OR 690259-83-7/BI OR 690259-84-8/BI OR 690259-85
                -9/BI OR
L17         151 SEA ABB=ON  PLU=ON  (690259-48-4/BI OR 690259-49-5/BI OR
                690259-50-8/BI OR 690259-51-9/BI OR 690259-52-0/BI OR 690259-53
                -1/BI OR 690259-54-2/BI OR 690259-55-3/BI OR 690259-56-4/BI OR
                690259-57-5/BI OR 690259-58-6/BI OR 690259-59-7/BI OR 690259-60
                -0/BI OR 690259-61-1/BI OR 690259-62-2/BI OR 690259-63-3/BI OR
                690259-64-4/BI OR 690259-65-5/BI OR 690259-66-6/BI OR 690259-67
                -7/BI OR 690259-68-8/BI OR 690259-69-9/BI OR 690259-70-2/BI OR
                690259-71-3/BI OR 690259-72-4/BI OR 690259-73-5/BI OR 690259-75
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                690259-80-4/BI OR 690259-81-5/BI OR 690259-82-6/BI OR 690259-84
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                690259-93-9/BI OR 690259-94-0/BI OR 690259-95-1/BI OR 690259-96
                -2/BI OR 690259-97-3/BI OR 690259-98-4/BI OR 690259-99-5/BI OR
                690260-00-5/BI OR 690260-01-6/BI OR 690260-02-7/BI OR 690260-03
                -8/BI OR 690260-04-9/BI OR 690260-05-0/BI OR 690260-06-1/BI OR
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                -7/BI OR 690260-11-8/BI OR 690260-12-9/BI OR 690260-13-0/BI OR
                690260-14-1/BI OR 690260-15-2/BI OR 690260-16-3/BI OR 690260-17
                -4/BI OR 690260-18-5/BI OR 690260-19-6/BI OR 690260-20-9/BI OR
                690260-21-0/BI OR 690260-22-1/BI OR 690260-23-2/BI OR 690260-24
                -3/BI OR 690260-25-4/BI OR 690260-26-5/BI OR 690260-27-6/BI OR
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                -2/BI OR 690260-32-3/BI OR 690260-33-4/BI OR 690260-34-5/BI OR
                690260-35-6/BI OR 690260-36-7/BI OR 690260-37-8/BI OR 690260-39
                -0/BI OR 690260-42-5/BI OR 690260-45-8/BI OR 690260-47-0/BI OR
                690260-49-2/BI OR 690260-50-5/BI OR 690260-51-6/BI OR 690260-52
                -7/BI OR 690260-53-8/BI OR 690260-54-9/BI OR 690260-55-0/BI OR
                690260-57-2/BI OR 690260-60-7/BI OR 690260-61-8/BI OR 690260-62
                -9/BI OR 690260-63-0/BI OR 690260-64-1/BI OR 690
L18         144 SEA ABB=ON  PLU=ON  L16 NOT L17
L19           5 SEA ABB=ON  PLU=ON  L18 AND NRS>3
                D SCA
L20         151 SEA ABB=ON  PLU=ON  L11 AND L16

     FILE 'ZCAPLUS' ENTERED AT 10:19:49 ON 12 MAY 2008
L21           3 SEA ABB=ON  PLU=ON  L20
L22          19 SEA ABB=ON  PLU=ON  BIT R?/AU
L23          89 SEA ABB=ON  PLU=ON  GIBLIN G?/AU
L24        2354 SEA ABB=ON  PLU=ON  HALL A?/AU
L25         319 SEA ABB=ON  PLU=ON  HURST D?/AU
L26          13 SEA ABB=ON  PLU=ON  KILFORD I?/AU
L27        1179 SEA ABB=ON  PLU=ON  MILLER N?/AU
L28          13 SEA ABB=ON  PLU=ON  SCOCCITTI T?/AU
L29           8 SEA ABB=ON  PLU=ON  L22 AND (L23 OR L24 OR L25 OR L26 OR L27
                OR L28)
L30          34 SEA ABB=ON  PLU=ON  L23 AND (L24 OR L25 OR L26 OR L27 OR L28)
L31          33 SEA ABB=ON  PLU=ON  L24 AND (L25 OR L26 OR L27 OR L28)
L32          18 SEA ABB=ON  PLU=ON  L25 AND (L26 OR L27 OR L28)
L33           5 SEA ABB=ON  PLU=ON  L26 AND (L27 OR L28)
L34           2 SEA ABB=ON  PLU=ON  L27 AND L28
L35           7 SEA ABB=ON  PLU=ON  L29 AND (L30 OR L31 OR L32 OR L33 OR L34)
L36          19 SEA ABB=ON  PLU=ON  L30 AND (L31 OR L32 OR L33 OR L34)
L37          17 SEA ABB=ON  PLU=ON  L31 AND (L32 OR L33 OR L34)
L38           4 SEA ABB=ON  PLU=ON  L32 AND (L33 OR L34)
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L39           2 SEA ABB=ON  PLU=ON  L33 AND L34
L40          21 SEA ABB=ON  PLU=ON  (L35 OR L36 OR L37 OR L38 OR L39)
L41           3 SEA ABB=ON  PLU=ON  L21 AND (L22 OR L23 OR L24 OR L25 OR L26
                OR L27 OR L28)
L42           3 SEA ABB=ON  PLU=ON  L12 AND (L22 OR L23 OR L24 OR L25 OR L26
                OR L27 OR L28)

     FILE 'MEDLINE, EMBASE, BIOSIS, WPIX' ENTERED AT 10:24:53 ON 12 MAY 2008
L43          27 SEA ABB=ON  PLU=ON  L40

     FILE 'BEILSTEIN' ENTERED AT 10:25:28 ON 12 MAY 2008
L44           0 SEA SSS SAM (L1 AND L3 AND L4 AND L9)
L45          13 SEA SSS FUL (L1 AND L3 AND L4 AND L9)
L46           9 SEA ABB=ON  PLU=ON  L45 AND BABSAN/FA
L47           4 SEA ABB=ON  PLU=ON  L45 NOT L46
                SEL BABSAN L46

     FILE 'BABS' ENTERED AT 10:27:21 ON 12 MAY 2008
L48           4 SEA ABB=ON  PLU=ON  (6644860/BABSAN OR 6702500/BABSAN OR
                6340976/BABSAN OR 6562995/BABSAN)

     FILE 'REGISTRY' ENTERED AT 10:28:00 ON 12 MAY 2008

     FILE 'ZCAPLUS' ENTERED AT 10:28:09 ON 12 MAY 2008
                D STAT QUE L40
                D STAT QUE L43

     FILE 'REGISTRY' ENTERED AT 10:28:41 ON 12 MAY 2008

     FILE 'ZCAPLUS' ENTERED AT 10:28:45 ON 12 MAY 2008
                D STAT QUE L40

     FILE 'MEDLINE, EMBASE, BIOSIS, WPIX' ENTERED AT 10:29:00 ON 12 MAY 2008
                D STAT QUE L43

     FILE 'ZCAPLUS, MEDLINE, EMBASE, BIOSIS, WPIX' ENTERED AT 10:29:20 ON 12
     MAY 2008
L49          22 DUP REM L40 L43 (26 DUPLICATES REMOVED)
                     ANSWERS '1-21' FROM FILE ZCAPLUS
                     ANSWER '22' FROM FILE BIOSIS
                D IBIB ABS L49 1-21
                D IALL L49 22

     FILE 'REGISTRY' ENTERED AT 10:30:20 ON 12 MAY 2008

     FILE 'ZCAPLUS' ENTERED AT 10:30:27 ON 12 MAY 2008
                D STAT QUE L21
                D IBIB ABS HITSTR L21 1-3

     FILE 'REGISTRY' ENTERED AT 10:31:02 ON 12 MAY 2008

     FILE 'ZCAPLUS' ENTERED AT 10:31:07 ON 12 MAY 2008
                D STAT QUE L12

     FILE 'BABS' ENTERED AT 10:31:22 ON 12 MAY 2008
                D STAT QUE L48

     FILE 'BEILSTEIN' ENTERED AT 10:31:38 ON 12 MAY 2008
                D STAT QUE L47
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     FILE 'ZCAPLUS, BABS, BEILSTEIN' ENTERED AT 10:31:59 ON 12 MAY 2008
L50          13 DUP REM L12 L48 L47 (4 DUPLICATES REMOVED)
                    ANSWERS '1-9' FROM FILE ZCAPLUS
                    ANSWERS '10-13' FROM FILE BEILSTEIN
               D IBIB ABS HITSTR L50 1-9
               D IDE ALLREF L50 10-13

     FILE 'WPIX' ENTERED AT 10:35:03 ON 12 MAY 2008
L51           8 SEA SSS SAM L1 AND L3 AND L4 AND L9
L52         109 SEA SSS FUL L1 AND L3 AND L4 AND L9
L53           3 SEA ABB=ON  PLU=ON  L52/DCR

     FILE 'WPIX' ENTERED AT 10:36:08 ON 12 MAY 2008
               D STAT QUE L53

     FILE 'ZCAPLUS, WPIX' ENTERED AT 10:36:30 ON 12 MAY 2008
L54          10 DUP REM L12 L53 (2 DUPLICATES REMOVED)
                    ANSWERS '1-9' FROM FILE ZCAPLUS
                    ANSWER '10' FROM FILE WPIX
               D IBIB ABS HITSTR L54 10


     FILE HOME

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   11 MAY 2008  HIGHEST RN 1020256-26-1
     DICTIONARY FILE UPDATES:  11 MAY 2008  HIGHEST RN 1020256-26-1

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

       Please note that search-term pricing does apply when
       conducting SmartSELECT searches.

     REGISTRY includes numerically searchable data for experimental and
     predicted properties as well as tags indicating availability of
     experimental property data in the original document.  For information
     on property searching in REGISTRY, refer to:

     http://www.cas.org/support/stngen/stndoc/properties.html

     FILE ZCAPLUS

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     FILE COVERS 1907 - 12 May 2008  VOL 148 ISS 20
     FILE LAST UPDATED: 11 May 2008  (20080511/ED)
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New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE MEDLINE
FILE LAST UPDATED: 10 May 2008 (20080510/UP). FILE COVERS 1949 TO DATE.

MEDLINE has been updated with the National Library of Medicine's revised 2008 MeSH terms. See HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

See HELP RANGE before carrying out any RANGE search.

FILE EMBASE
FILE COVERS 1974 TO 12 May 2008 (20080512/ED)

EMBASE was reloaded on March 30, 2008.

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Beginning January 2008, Elsevier will no longer provide EMTREE codes as part of the EMTREE thesaurus in EMBASE. Please update your current-awareness alerts (SDIs) if they contain EMTREE codes.

For further assistance, please contact your local helpdesk.

FILE BIOSIS
FILE COVERS 1926 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 12 May 2008 (20080512/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

FILE WPIX
FILE LAST UPDATED: 4 MAY 2008 <20080504/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200829 <200829/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> IPC Reform backfile reclassification has been loaded to the end of November 2007. No update date (UP) has been created for the reclassified documents, but they can be identified by 20060101/UPIC and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC and 20071130/UPIC. <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
http://scientific.thomsonreuters/support/patents/coverage/latestupdates/

EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0:
http://www.stn-international.com/archive/presentations/DWPIAnaVist2_0710.p

>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<

>>> Updated PDF files in the following links:
http://www.stn-international.de/stndatabases/details/ico_0803.zip
http://www.stn-international.de/stndatabases/details/epc_0803.zip
Supplement of all changed ECLA items:
http://www.stn-international.de/stndatabases/details/ecla_0803s.zip <<

>>> Please note that the COPYRIGHT notification has changed <<<

FILE BEILSTEIN
FILE LAST UPDATED ON April 1, 2008

FILE COVERS 1771 TO 2008.
FILE CONTAINS 10,322,808 SUBSTANCES

>>>PLEASE NOTE: Reaction Data and substance data are stored in
separate documents and can not be searched together in one query.
Reaction data for BEILSTEIN compounds may be displayed
immediately with the display codes PRE (preparations) and REA
(reactions). A substance answer set retrieved after the search
for a chemical name, a compounds with available reaction
information by combining with PRE/FA, REA/FA or more generally
with RX/FA. The BEILSTEIN Registry Number (BRN) is the link
between a BEILSTEIN compound and belonging reactions. For mo
detailed reaction searches BRNs can be searched as reaction
partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

```
**********************************************************************
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.                *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE   *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE          *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.                        *
* FOR PRICE INFORMATION SEE HELP COST                                *
**********************************************************************
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>>> Price change as of January 1st, 2008: Connect Time and Structure
Search fees re-introduced. See NEWS and HELP COST <<<

FILE BABS
FILE LAST UPDATED: 17 MAR 2008 <20080317/UP>
FILE COVERS 1980 TO DATE.

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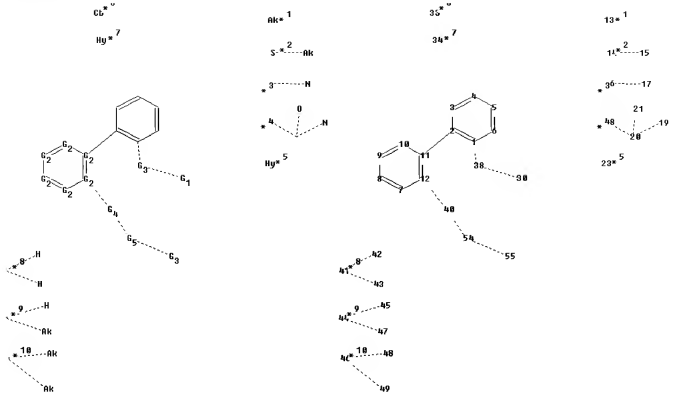


chain nodes :
13 14 15 16 17 18 19 20 21 23 30 33 34 38 40 41 42 43 44 45 46 47 48 49 54 55
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
1-38 2-11 12-40 14-15 16-17 18-20 19-20 20-21 30-38 40-54 41-42 41-43 44-45 44-47 46-48 46-49 54-55
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
exact/norm bonds :
1-38 2-11 7-8 7-12 8-9 9-10 10-11 11-12 12-40 14-15 16-17 18-20 19-20 20-21 30-38 40-54 41-42 41-43 44-45 44-47 46-48 46-49 54-55
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

G1:[*1],[*2],[*3],[*4],[*5]

G2:C,N

G3:[*6],[*7]

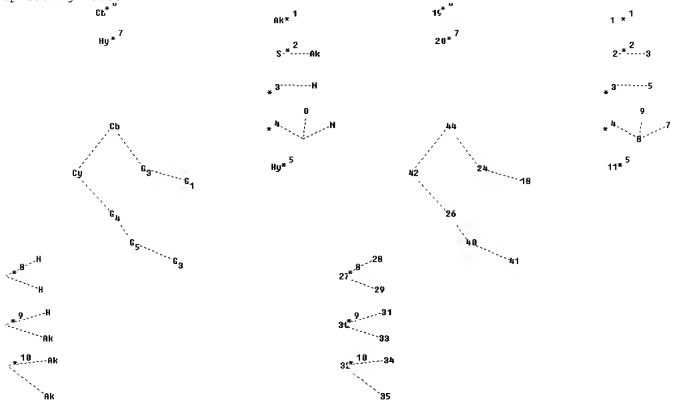
G4:O,S

G5:[*8],[*9],[*10]

Connectivity :
21:1 E exact RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS

19:CLASS 20:CLASS 21:CLASS
23:Atom 30:CLASS 33:Atom 34:Atom 38:CLASS 40:CLASS 41:CLASS 42:CLASS
43:CLASS 44:CLASS
45:CLASS 46:CLASS 47:CLASS 48:CLASS 49:CLASS 54:CLASS 55:CLASS
Generic attributes :
33:
Saturation : Unsaturated

Uploading L3.str




chain nodes :
1 2 3 4 5 6 7 8 9 11 18 19 20 24 26 27 28 29 30 31 32 33 34
35 40 41 42 44
chain bonds :
2-3 4-5 6-8 7-8 8-9 18-24 24-44 26-40 26-42 27-28 27-29 30-31 30-33
32-34 32-35 40-41 42-44
exact/norm bonds :
2-3 4-5 6-8 7-8 8-9 18-24 24-44 26-40 26-42 27-28 27-29 30-31 30-33
32-34 32-35 40-41 42-44

G1:[*1],[*2],[*3],[*4],[*5]

G3:[*6],[*7]

G4:O,S

G5:[*8],[*9],[*10]

Connectivity :

```
9:1 E exact RC ring/chain  42:4 X maximum RC ring/chain  44:4 X maximum RC
ring/chain

Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  5:CLASS  6:CLASS  7:CLASS  8:CLASS  9:CLASS
11:Atom  18:CLASS  19:Atom  20:Atom  24:CLASS  26:CLASS  27:CLASS  28:CLASS
29:CLASS  30:CLASS  31:CLASS
32:CLASS  33:CLASS  34:CLASS  35:CLASS  40:CLASS  41:CLASS  42:Atom  44:Atom
Generic attributes :
19:
Saturation             : Unsaturated
42:
Saturation             : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System    : Monocyclic
44:
Saturation             : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System    : Monocyclic

Element Count :
Node 42: Limited
    C,C5-6
    N,N0-1
    S,S0
    O,O0
    P,P0

Node 44: Limited
    C,C6



Uploading L4.str
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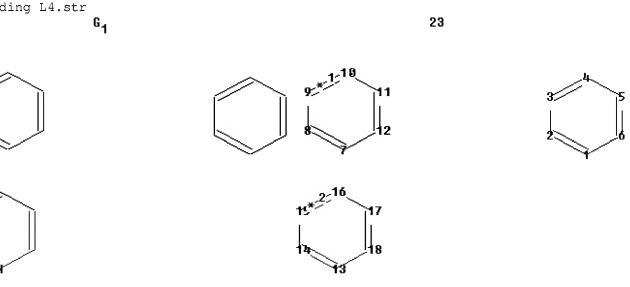


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chain nodes :
23
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18
ring bonds :
```
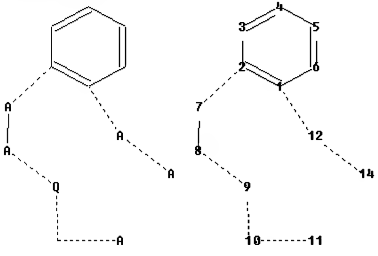

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15
15-16 16-17 17-18
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15
15-16 16-17 17-18
isolated ring systems :
containing 1 : 7 : 13 :

G1:[*1],[*2]

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 23:CLASS

Uploading L9.str




chain nodes :
9 10
ring nodes :
1 2 3 4 5 6 7 8 11 12 14
chain bonds :
1-12 2-7 8-9 9-10 10-11
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 12-14
exact/norm bonds :
1-12 2-7 8-9 9-10 10-11 12-14
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8
isolated ring systems :
containing 1 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 10:CLASS
11:Atom 12:Atom 14:Atom

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